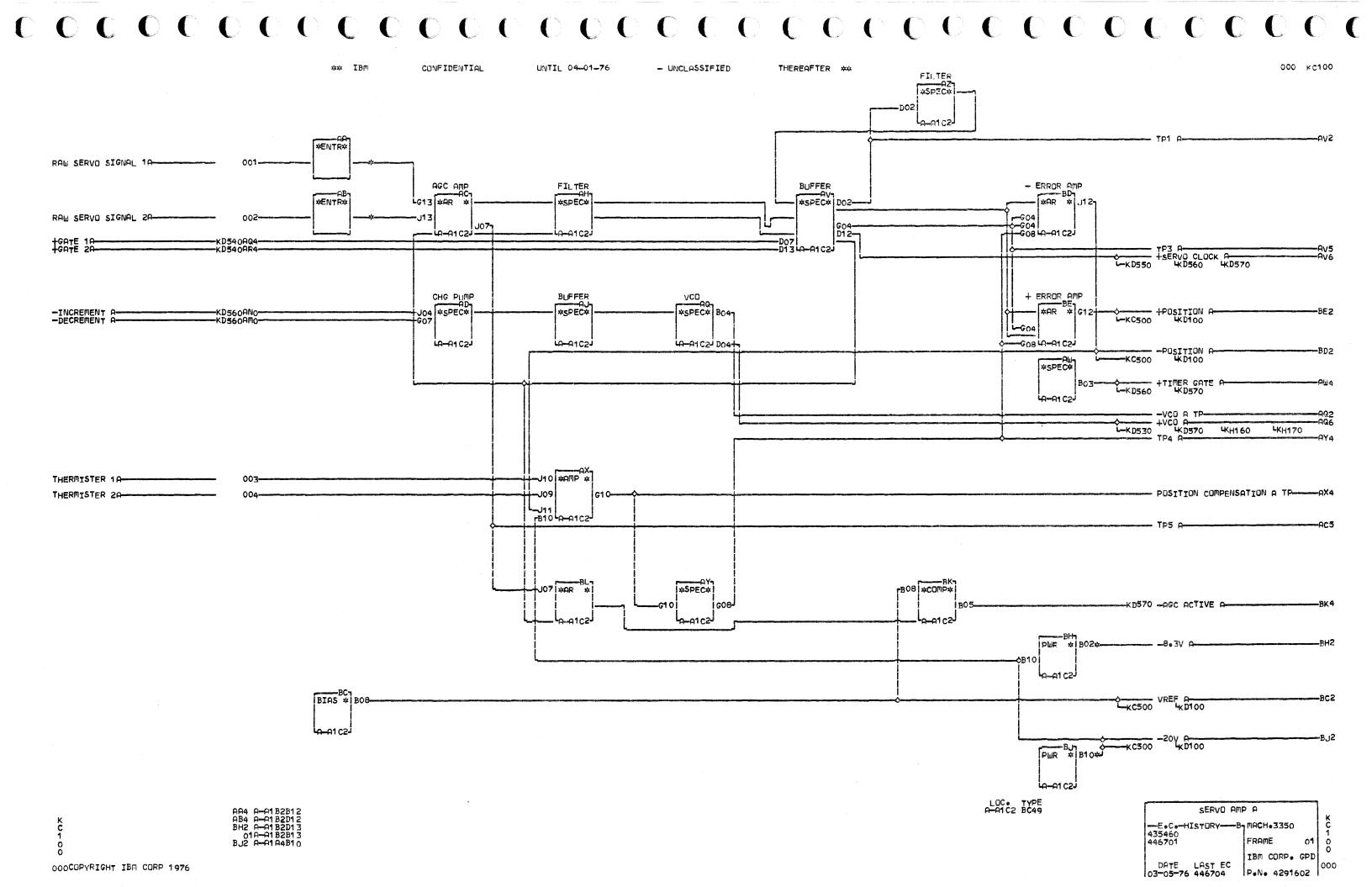
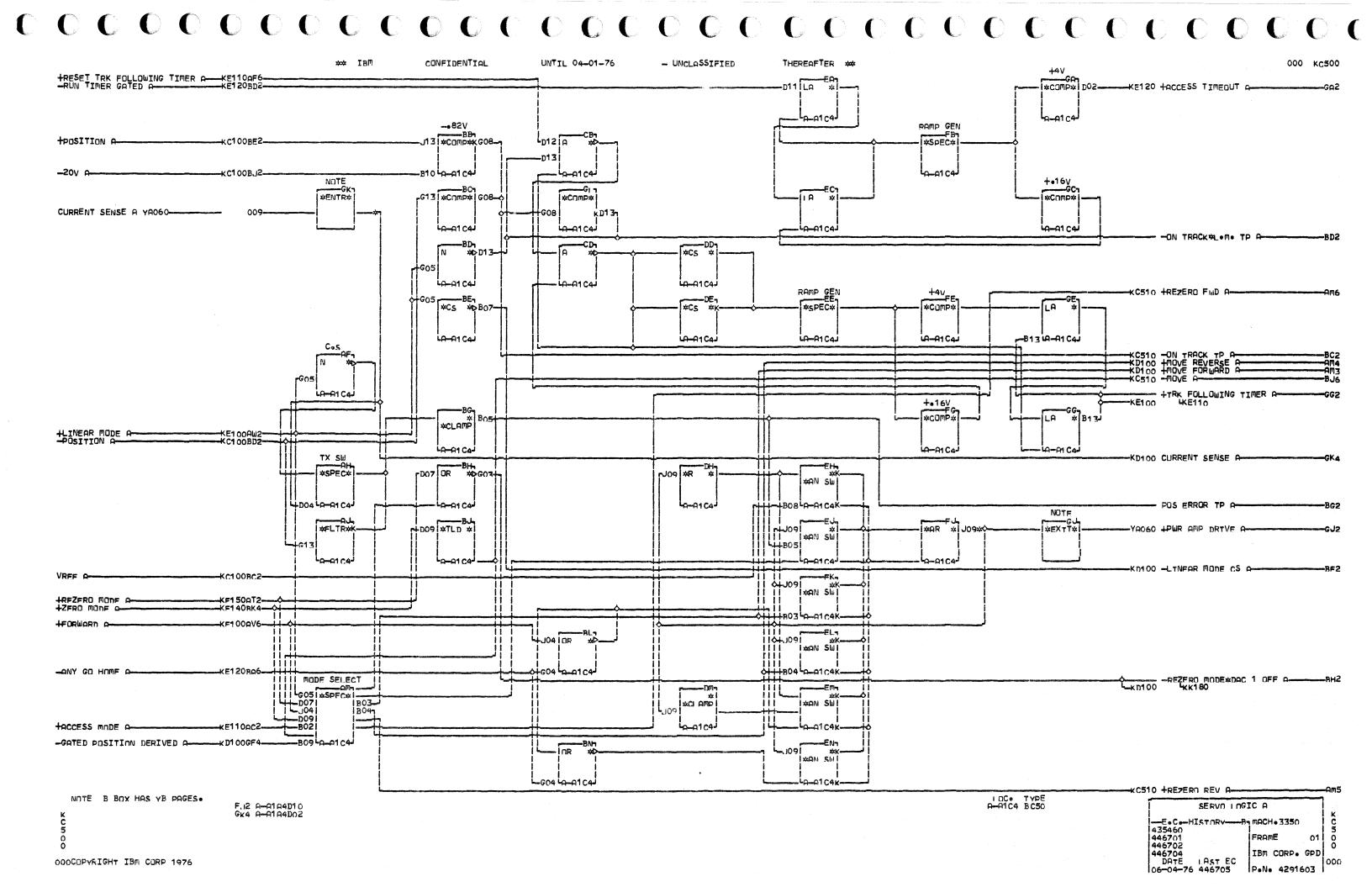


LOC. TYPE





CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED 000 KC510 ¢¢ IBM THEREAFTER ** SUM GND CB7 *COMP* B12-TDAC A-CLIRRENT MAGNITUDE A--KD100EK2--KD100EC2--KE110 -END ACCELERATE A--*CL AMP LA-A1 C4 j نهى 10-4 AO -KD100 -VELOCITY ENABLE A-----MOVE A--KC500BJ6-نه-۱۲۵ما --BE7 J07--! AO -ANY GO HOME A--KE120BA6-نهـ ۹۱ دعـا -KD100 +POSITION ENABLE A-G07 *CS *C OR HREZERO REV A--KC500AM5 *CLAMP -VELOCITY A--KD100FE2-+ GUARDBAND LATCH A--KD500AX2---B02 IA--A1 C4J -G02 OR *CS 7J02LA-A1C4 HREZERO FWD A--KC500AM6ф-802 ^і-А--А1 С4-^і HACCESS MODE A KE110AC2-HIGH VELOCITY SET POINT A KE100AY2-0-J12 | +C0MP+ | G10--TARGET VELOCITY A-KE150 -J12 *COMP* J10 -KE130 -VELOCITY GRTR 20 IPS A---49-01C4 *COMP* -ON TRACK TP A--KC500BC2-_J12 #COMP#K G09--END DECELERATE A--608 *COMP* 609-1A-A1C4 LUC. TYPE A-A1C4 BC50 SERVO LOGIC A -E.C.-HISTORY-B-MACH.3350 435460 446701 FRAME IBM CORP. GPD DATE LAST EC | P.N. 4291604 OOOCOPYRIGHT IBM CORP 1976

* IBM CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** -KE150 -ALLOW REZERO A-+DIFF GREATER THAN 127 A-+ACCESS MODE A------KG130AA6--KE110AC2-VEL CTL RESET VEL SUM FILTER! -GB1 -G08 *SPEC* J09 *TX -KC51 OBE2--VELOCITY ENABLE A-*AN SWI KG120AV6 **ــ5**0ل HORWARD A--KE100AV6--A1D2k ما 3 كان ĹA--A1 D2-LA-- 61 D2-j نـ12 A-- 1 B1 عـ +ACCESS START A--KE110AS6-*AR ن20 ۵1 مـــ *AN SW -KC510 -VELOCITY A-G13 LA-A1 D2K-ند1 10-4 -CUARSE TRACK A TP--KC510 CURRENT MAGNITUDE A--FINE TRACK-A TP--2.4V -B10 COMP X KC100BJ2--20V F نےD2 A1 D2 الے +TRACK XING PULSE A-DAC 2* BO4-COMP * LA Cs *AN SW -Bo2 -G02 LA-A1 D2KG02-- نعط A1 ما LD12 LA-A1 D2 10-A1 D2 i-A-A1 D2 j --G04DA--A1D2Din-A1 D2i KE160 -TRACK XING A-LA GO2 نجم A1 D2 19-91 D2K -.45V COMP ×AN Si - FILL IN TP A-ر20 PA-P1 —EHn ≥ ×KB1 3* COMP #KJ02-*AR *AN SWI LO-01 DS +POSITION A-CURRENT SENSE A-+MOVE FORWARD A-+MOVE REVERSE A-KC100BF2-ØB04 ×COMP* KC500AM3-B13 SPEC*KB04 *AN SWI -POSITION A-KC100BD2 -G04 -KC500 -GATED POSITION DERIVED A--DOS LA-A1 DS KC100BC2-VRFF 0-40-01 D2--POSITION CURVE A TP-KC500BE2 -LINEAR MODE CS A-*DAC F B03 cs *KD13-*DAC 2 -KC500BH2-LJ13 -REZERO MODE*DAC 1 OFF A-A-A1D2 —G13^LA−A1D2-4a--91D2 KC510 +DAC A -DIFF BIT 7AkG130AG2-CL7 -KG130AF2--D10 DAC 1x -DIFF BIT 5A--DIFF BIT 4A--KG130AE2--KG130AD2--D11 | -B09 | KG130AC2 -D09 نـ102مــما KG130ABZ -DIFF BIT 1A KG130AH2 LA--A1 D2k D1 3 -J06 CS *KB03-*DAC F لـ102 <u>مــما</u> +POSITION ENABLE A--KC51 0BF2--G03 ^LA--A1 D2-J + DC EQUALS 1A--KG130AK2-

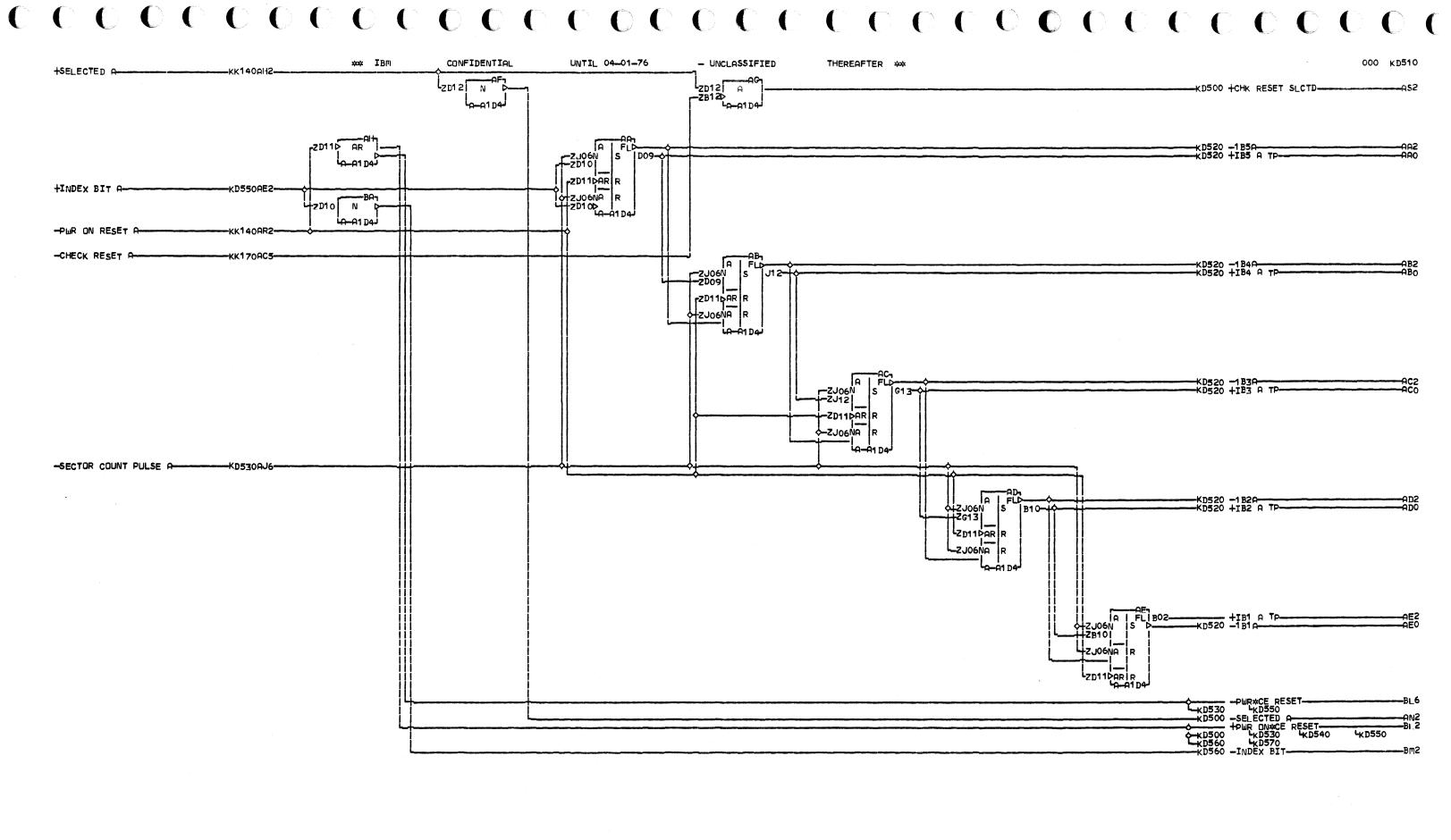
SERVO ANALOG A

CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREOFTER ** -ZBO7 -KD520 -INDEX GATE--SELECTED A--SET RD#IIR OR PAD CTRI. A-+CHK RESET SI CTD--KD51 0AN2--KH100AA2--KD51 0AS2-KJ540AB2-+MISSING INDEX A-HZG02D -INDEX MARK A TP-+VALID INDEX 2A TP-+VALID INDEX 1A-+INDEX GATE A--KD520AC6--KD520AH2--KD520AJ2--KD550AH2-7G03DA -zB07> +PWR DN#CE RESET--KD51 0BL2 + GUGRARONA LOTCH G-KF110 KE140 INRI FI.IJO2-+GUARDBAND PATTERN 1A-+RESET GUARDRAND POSITION A-KD560AH6-HOC. TYPE A-A1D4 BC46 ACTIVE TRACK A -EeCe-HISTORV-B MACHe3350 435460 446701 FRAME 446704

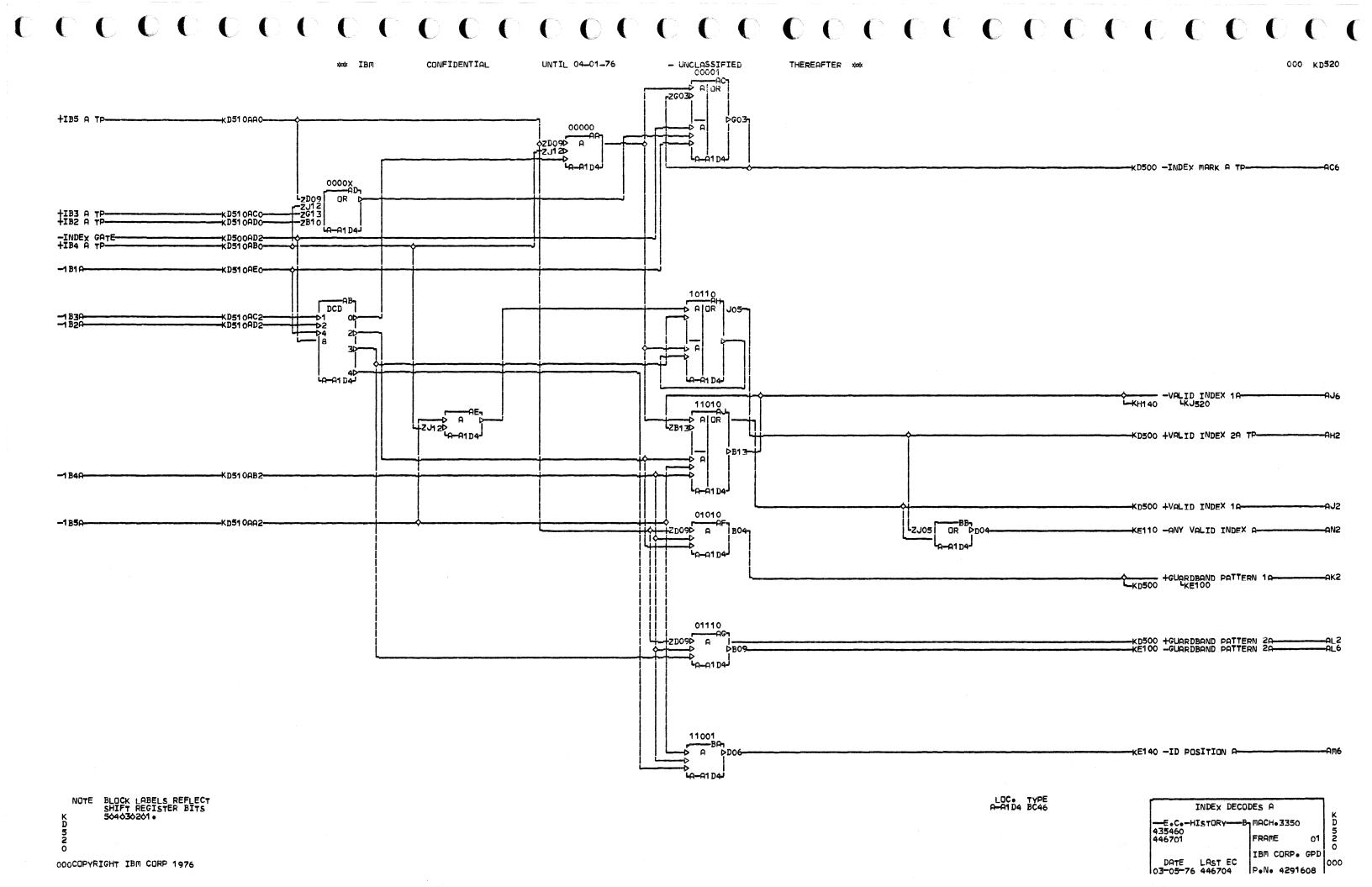
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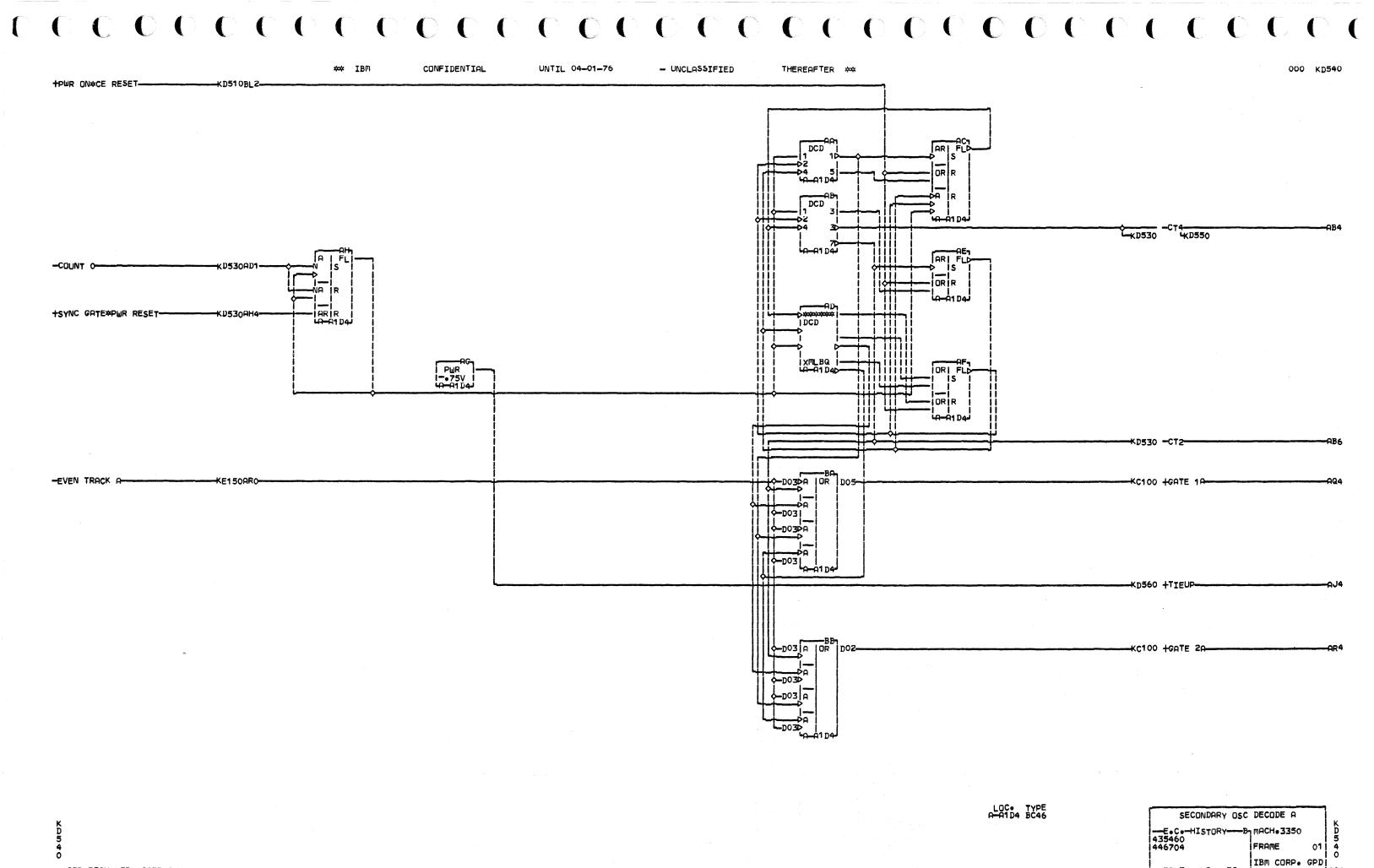
DATE LAST EC 06-04-76 446705



LOC. TYPE A-A1D4 BC46



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DATE LAST EC | 10-01-76 446706 | P.N. 4291610 |

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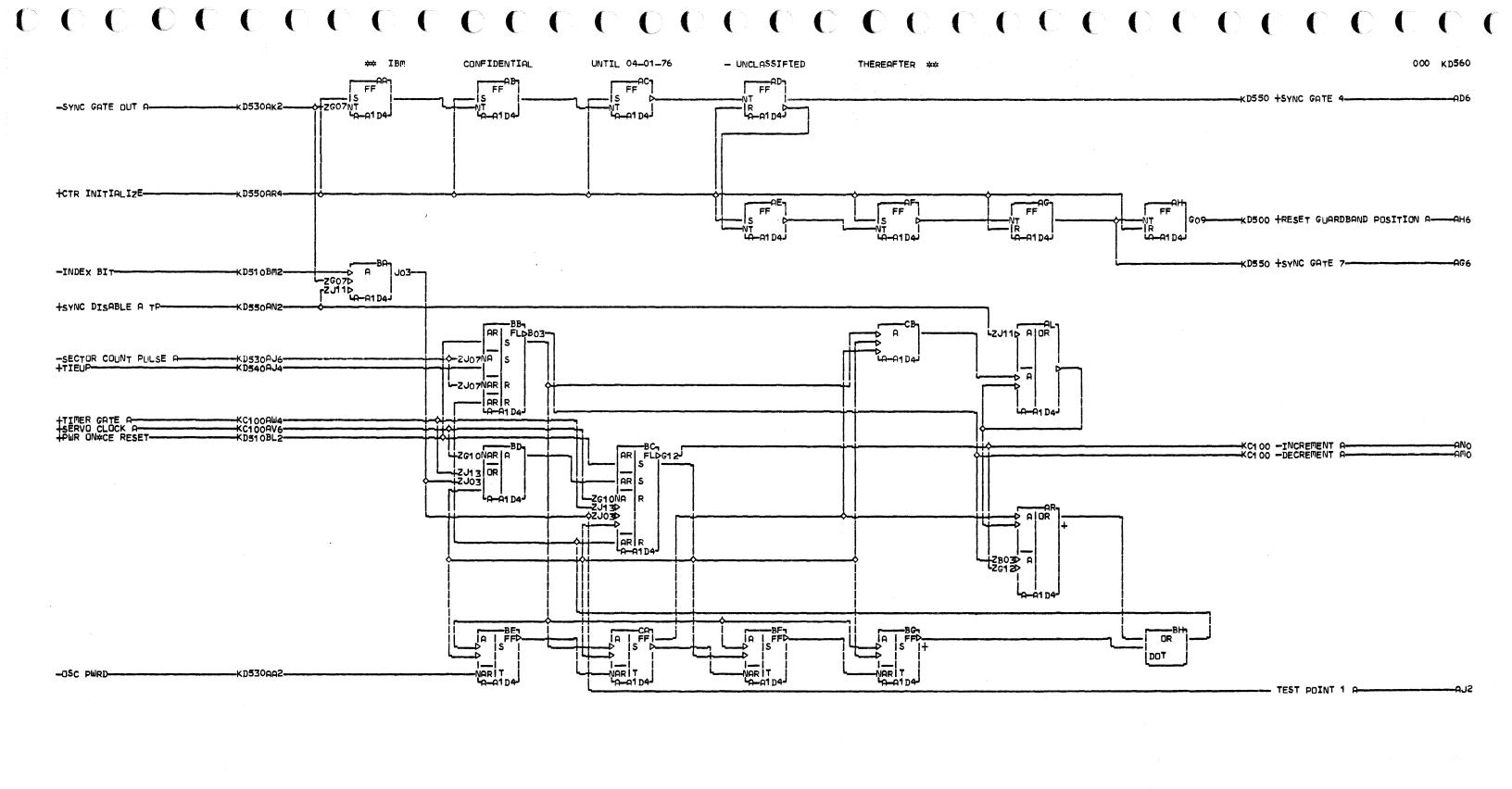
- UNCLASSIFIED ## IBM CONFIDENTIAL UNTIL 04-01-76 THEREAFTER ** +INDEX GATE A--KD560 +SYNC DISABLE A TP +SERVO CLOCK A--KC100AV6* H | FL | GOS A I FL G10 IS - ARIR DARIR LA-A1D4 KD540AB4-KD510 +INDEX BIT A-ZGOSD ALOR +SYNC GATE 4-+SYNC GATE 7-+PWR DN*CE RESET--PWR*CE RESET--KD560AG6--KD510BL2--KD510BL6--KD560 +CTR INITIALIZE-

> KC100AV6 RESISTOR A-A1D4G10

LOC. TYPE A-A1D4 BC46 INDEX BIT AND INDEX GATE A

-E.C.-HISTORY-BTMACH.3350
435460
446701
446702
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DATE LAST EC
10-01-76 446706
P.N. 4291611

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LOC. TYPE

GB POSITION RESET COUNTER A

-E.C.-HISTORY-B, MACH.3350
435460
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03-05-76 446704
P.N. 4291612

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UNTIL 04-01-76

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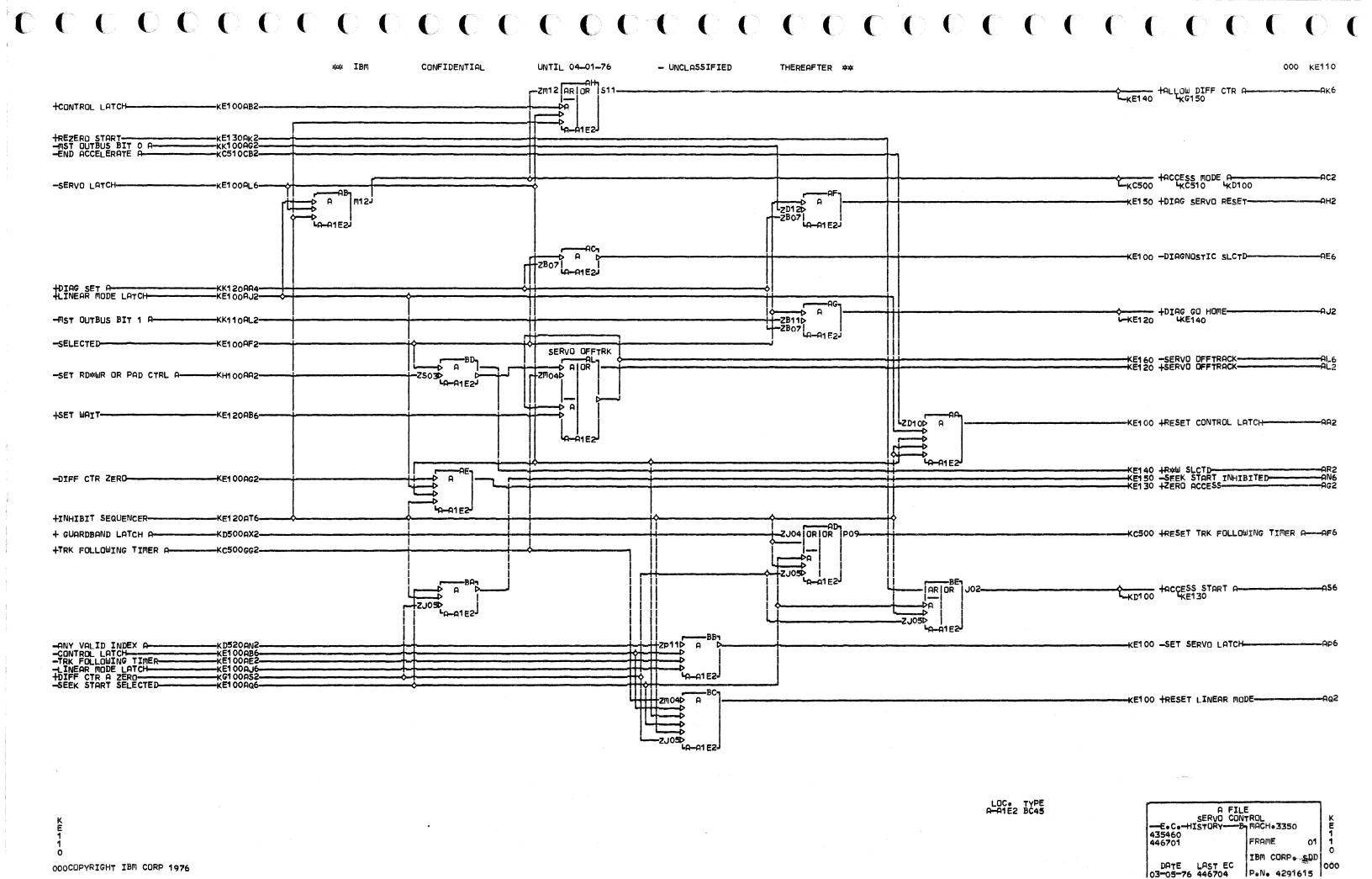
THEREAFTER **

FF RE TVCD A +TIMER GATE A--KC1 00AW4--KC1 00AV6-ZG1 ONAR | AB -+MOTOR AT SPEED A-KF120 KF130 KF260 -AGC ACTIVE A--KC100BK4--KD510BL2-ZB11 OR R

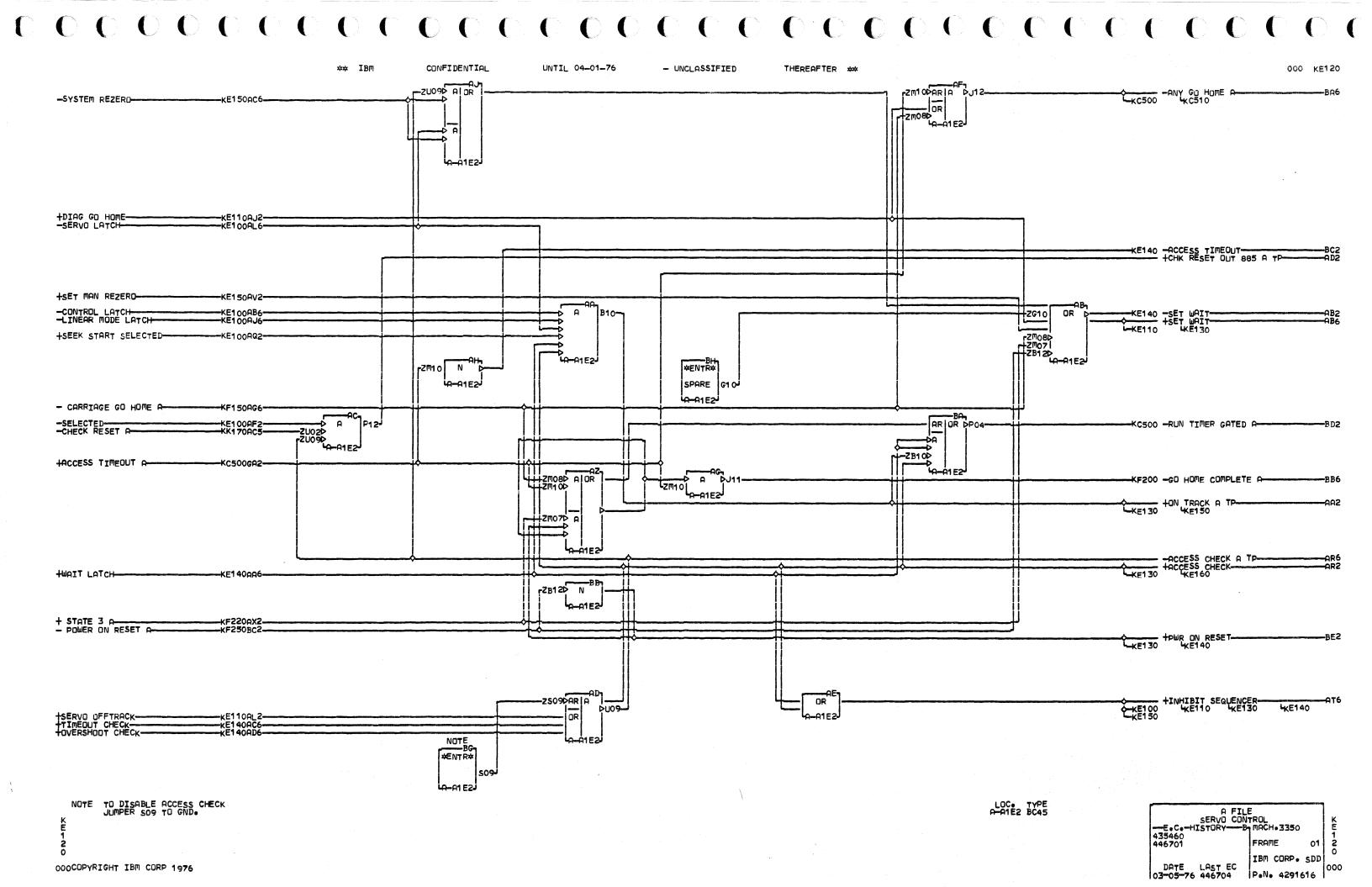
LOC. TYP

000 KD570

- UNCLASSIFIED 000 KE100 ** IBM CONFIDENTIAL UNTIL 04-01-76 THEREAFTER ** - TRK FOLLOWING TIMER-TRK FOLLOWING TIMER A----KC500GG2---AloR N CTRL LICH -GUARDBAND PATTERN 2A-KD520AL6-ZD07D - HLINEAR MODE A-KC500 LA-A1E2 HRESET CONTROL LATCH ----KE110AA2-+CONTROL LATCH LA-A1E2 -KE110 -LINEAR MODE LATCH-KE120 KE150 -KE110 -REZERO MODE LTCH--KE150AQ6-**4KE120 4KE160** -DA IORI -END DECELERATE A--KC51 0BM2-ZG05D 1 +GUARDBAND PATTERN 1A--KD520AK2-LIN MODE LICH HWAIT LATCH--KE140AA6-+RESET LINEAR MODE-+REZERO MODE LTCH-KE110AQ2 +INHIBIT SEQUENCER----KE120AT6-Πĭ SERVO LTCH -SET SERVO LATCH--KE110AP6--KE140 +SERVO LATCH---+SELECTED A--KK140AH2 LZB05 N - -SERVO LATCH-KE120 KE160 +SEEK START SELECTED-KE150 -SEEK START SELECTED-KE110 -KE140 -KK170AC3--SEEK START A-€ KE110 KE160 +DIFF CTR A ZERO--KG100AS2--KC510 HIGH VELOCITY SET POINT A--DIRECTION BIT IN A---KG190BG6--ZD060 --KE110AE6--DIAGNOSTIC SLCTD-ZDO60 +FORWARD A--KC500 +KD100 -KE110 +LINEAR MODE LATCH-KE140 A FILE
SERVO CONTROL
435460
446701 LOC. TYPE IBM CORP. SDD DATE LAST EC OOOCOPYRIGHT IBM CORP 1976 P.N. 4291614 03-05-76 446704



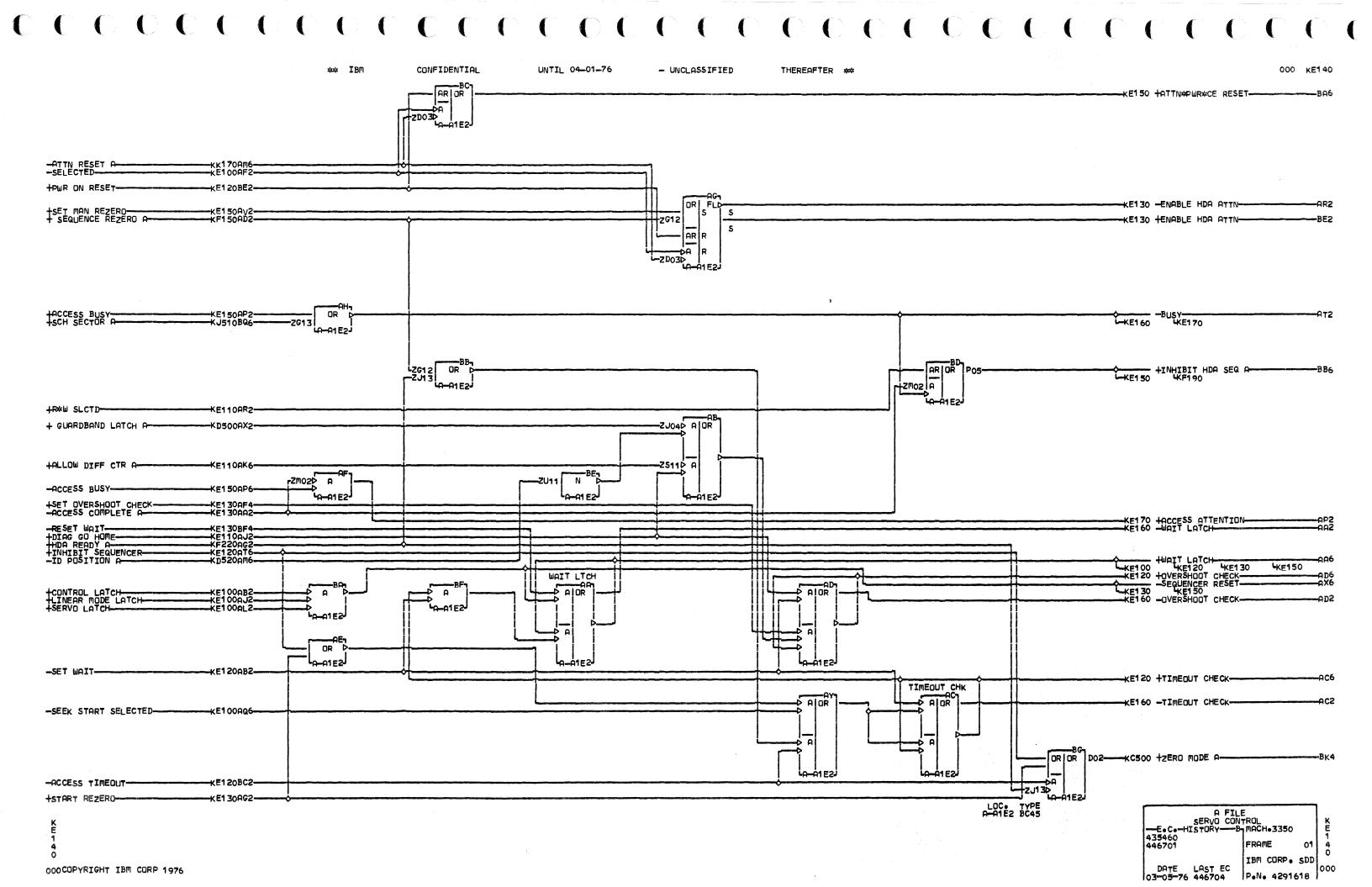
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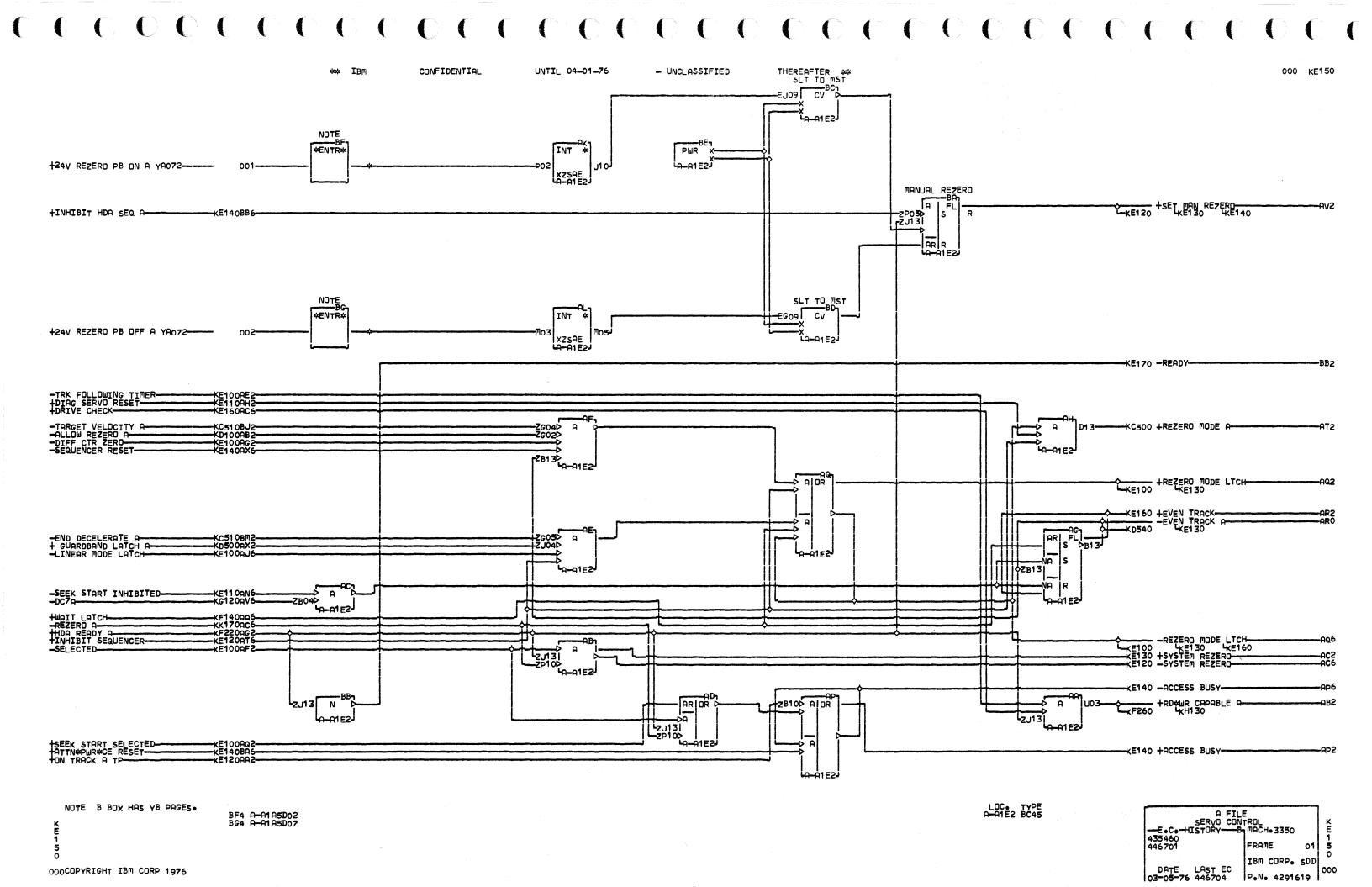


CONFIDENTIAL 000 KE130 xx IB™ UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** I DCD BAT -KE100AU2-+LINEAR MODE A-OR -KE11 0AG2 AR! FL ZB09 NR R TRACK XING PUI SE A--- k D100CE2-HACCESS START A--KE110AS6-DCDBC HWAIT LATCH--KE140AA6-AR FL ZB09 OR R +SET MAN REZERO--KE150AV2--VELOCITY GRTR 20 IPS A-+INHIBIT SEQUENCER--REZERO MODE LTCH--KC51 0BK2--KE120AT6--KE150AQ6-149-A1E2 A KE110 +REZERO START-نج ۹۱۴هـماً ZB1 DAR A DG07-HENABLE HDA ATTN--KF140BE2--KF150AR0--EVEN TRACK A--SFQUENCER RESET--KF140AX6 - ARFZEROXPWR RESET A TP-OR HPWR ON RESET--KF120RF2--KF150002-+REZERO MODE LTCH-+SYSTEM REZERO--KF150ac2-KF140 +STORT REZERO-KG150 -ANY REZERO A--ACCESS COMPLETE A-KE140 KF150
-KE140 +SET OVERSHOOT CHECK-C iii KE120002-UB DWOS +ON TRACK A TP--ENABIE HDA ATTN-+SET WAIT +ACCESS CHECK--KE140AR2--KE120AB6--KE140 -RESET WAIT-KE120AR2 A FII E
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446704 1 DC TYPE A-A1E2 BC45 FRAME 01 IBM CORP. SDD DATE LAST EC OOOCOPYRIGHT IBM CORP 1976

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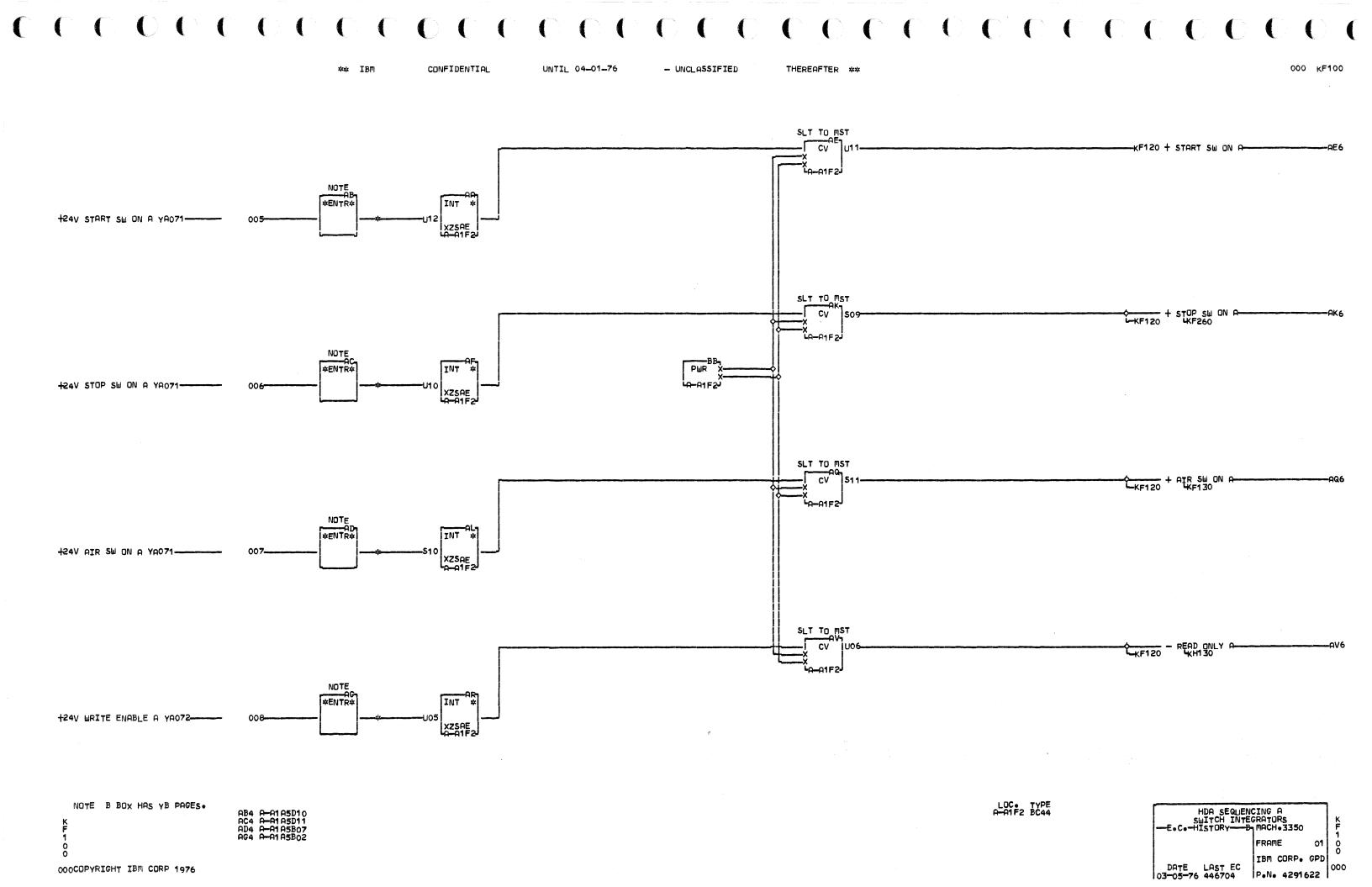
CONFIDENTIAL x∞ IBM UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** 000 KE160 PAOR -KHO10 +ACCESS*CHECK STATUS BIT OA-AF2 AIOR -SENSE STATUS 3 A-KK170AF6 -ZS07D ---zs12ḃ A + GUARDBAND LATCH A--KD500AX2--bA DRÌ -KHO10 +ACCESS*CHECK STATUS BIT 1A----AG2 -TIMEOUT CHECK---KE140AC2--OVERSHOOT CHECK--ZG04D A DR -TARGET VELOCITY A--KC51 0BJ2--KHO10 +ACCESS*CHECK STATUS BIT 2A-----AA2 ZS07D نA-A1E2 -KE1 70 -DRIVE CHECK--A OR +GATE MACH OR R*W STATUS A-KK140AC6-N ALOR -KHO10 +ACCESS*CHECK STAT BIT 2A--نA1E2-1 LA-A1E2 0-125120 A KE120AR2 LA-41E2 -KE150 +DRIVE CHECK-KE110AL6-KE150AQ6-A OR S13-KHO10 +ACCESS*CHECK STATUS BIT 3A---AJ2 \$-\Z\$12Þ ۰۲ -A1E2 ان<u>A-</u>A1E2 Z507D A -TRACK XING A--KD100BF6-A OR -KHO20 +ACCESS*CHECK STATUS BIT 4A-AL2 ل-11E2م KE100AF2 KK170AG6 -KE100AL6--SERVO LATCH-ALOR -ZS12D PA OR P13 +GATE MACHINE STATUS A-KK140AA2--KHO20 +ACCESS#CHECK STATUS BIT 5A-AM2 الم-152م -CONTROL LATCH--KE100AB6 -KE170AA6 -ON LINE-ALOR -KE100AJ6 -ZS12D -LINEAR MODE LATCH--ACCESS HDA ATTN--KE130AN6 P OR SO KHO20 +ACCESS*CHECK STATUS BIT 6A----AN2 LA-A1E2 -KE170AY6--KE140AT2-+SEEK CPLT*SECTOR COMPARE--SEEK CPLT*SCTR CMPR*SCH SCTR-KE170AZ2-DA OR -KHO20 +ACCESS#CHECK STATUS BIT 7A----AB2 25120 A -WAIT LATCH-KE140AA2 -KHO20 +ACCESS*CHECK STAT BIT 7A-A OR -SENSE STATUS 2 A-HEVEN TRACK-KK170AE6 KE150AR2 SERVO CONTROL
-E.C.-HISTORY-B MACH.3350
435460
446701 LOC. TYPE DATE LAST EC 03-05-76 446704

P.N. 4291620

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000 KE170 CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** -Z∏09 -ZG13 -KE160 -SEEK CPLT*SCTR CMPR*SCH SCTR-AZ2 -KE140AT2--KE160AC2--KE160 +SEEK CPLT#SECTOR COMPARE--KK150 +ATTENTION A--KE130AN6 -ACCESS HDA ATTN--KE160 -- ON LINE ---LOC. TYPE A-A1E2 BC45

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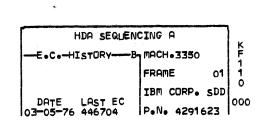
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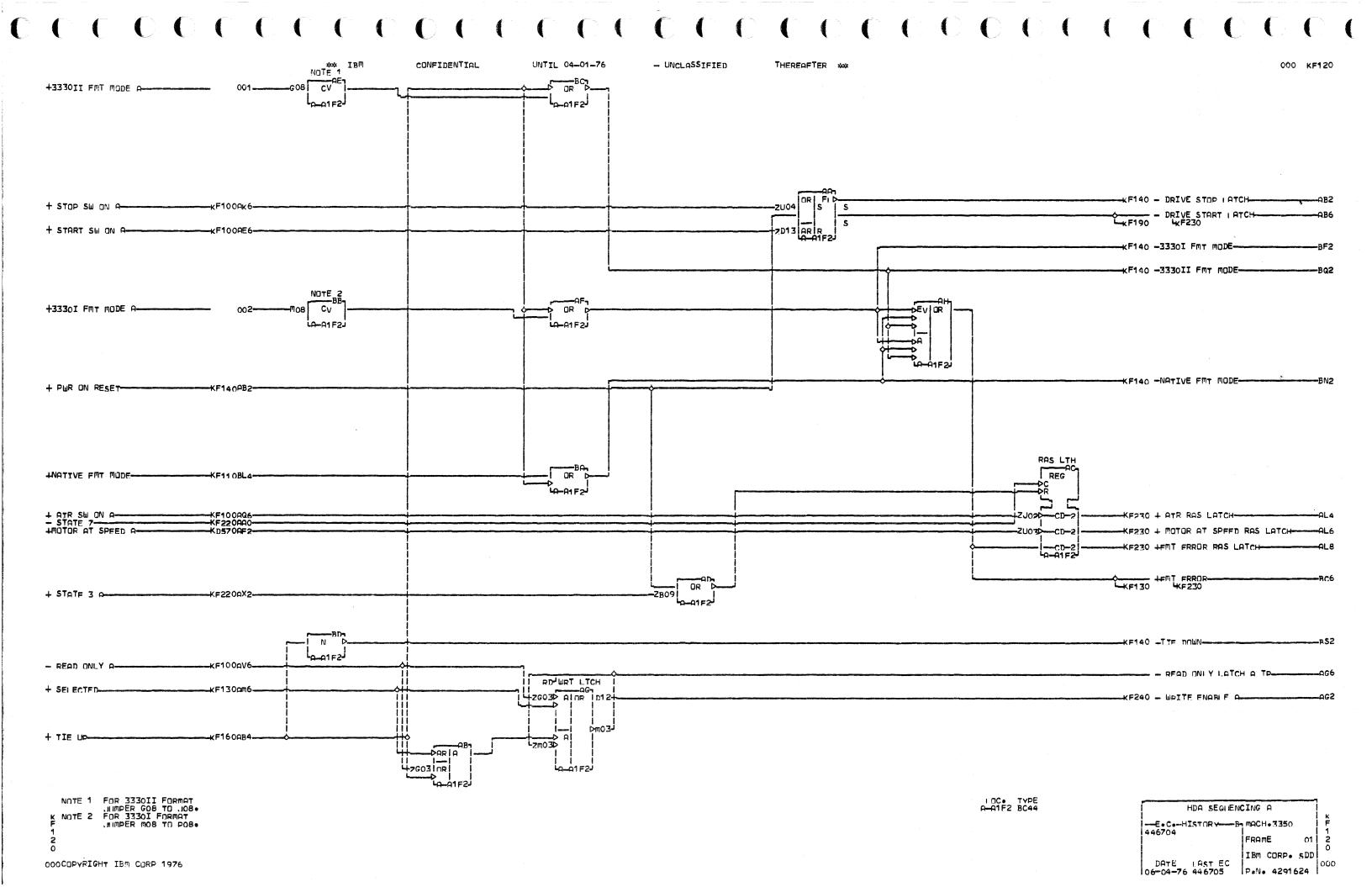
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1000 TYPE A-A1F2 BC44 HDA SEQUENCING A

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06-04-76 446705

P.N. 4291625

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KF130

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xox IB™ CONFIDENTIAL LINTIL 04-01-76 - UNCLASSIFIED THEREAFTER XX 000 kF140 + PWR UN RESET-- POWER ON RESET A-KF250BC2-AR -ABZ 4KF200 LA-A1F21 -KF240 - INHIBIT RECYCLE-+INHIBIT HDA RECYCLE A TP-----AFZ - STATE 7-+ RUN STATUS GOOD--KF220AA0--KF130AE2--KK170AL2-+SET READ*WRITE A--KF130AM2--KF120BS2-- SELECTED-> ALUR -KF240 - SEL SET RD*WR--KF220AP3-- STATE 0--3330II FMT MUDE--KF120BQ2--ZBO3D AIDF -KF190 + CUNTRUL RESET-- - CONTROL PESET--KF160 -KK170AC5--KF120AB2--KF160AF6-+ STATE 6--KF220AW2--KF240 -NATIVE-- STATE 6--KF220AA9--NATIVE FMT MODE----KF120BN2-A -KE240 -3330II-LA-AIFZ -KF240 -3330I---KF240 HNATIVE--3330I FMT MODE----KF120BF2-LOC. TYPE A-R1F2 BC44 FROME ITS: CORPA SED 1 001E LEST EC | 15 C) MAG SED | 104-01-77 446708 | PaNe 4291626 | OUGURYFIGHT IBM CURP 1976

000 KF150 CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** AR PMOZ-KE120 - CARRIAGE GO HOME A-- STATE 7----KF220AA0-La-01F2 -KF210 - ACCESS COMPLETE PULSE--KE130AA2--KF160AB4--KF220AX2-+ STATE 3 A -KE140 + SEQUENCE REZERO A-- MOTOR AT SPEED-- STATE 2 -KF130AA2--KF220AA5-

> 1 0C+ TYPE A-A1F2 BC44

HDA SEQUENCING A

-E.C.-HISTORY-B-MACH.3350 F
446704 FRAME 01 5
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DATE LAST EC
06-04-76 446705 P.N. 4291627

CONFIDENTIAL 000 KF160 ** IBM UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** SET CK A OR - STATE 1- INITIAL STATUS BAD--KF220AA4--KF130AR2-- + TIE UP-KF120 - STATE 3-+ RUN STATUS GOOD-- END 15 SEC TIMER--KF220AA6--KF130AE2--KF170AP6-1A-A1F2 CORR 1E A OR - CONTROL RESET--KF140AD6--KF220AA3-19-11-51 **PB03** + PWR ON RESET--KF140AB2-ZBO35 LA-A1F2J

LOC. TYPE

HDA SEQUENCING A
CHECK LATCH
-E.C.-HISTORY-B, MACH.3350
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DATE LAST EC
03-05-76 446704
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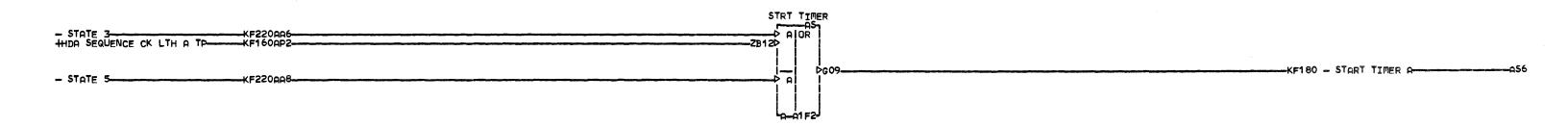
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UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

- 15 SEC DELAY A KF180BF2 - KF210 + END 15 SEC TIMER - AFTIMER RESET CONTROL A KF180BF4 - END 15 SEC TIMER - AFTIMER RESET CONTROL A KF180BF4 - END 15 SEC TIMER - AFTIMER RESET CONTROL A KF180BF4 - END 15 SEC TIMER - AFTIMER - AFTIMER - AFTIMER - AFTIMER RESET CONTROL A KF180BF4 - END 15 SEC TIMER - AFTIMER - AFTIM



LOC. TYPE A-A1F2 BC44 HDA SEQUENCING A
TIMER CONTROL
-E.C.-HISTORY-B, MACH.3350
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P.N. 4291629

000 KF170

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CONFIDENTIAL

UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

000 KF180

- START TIMER A-KF170AS6-

TD DM04 KF170 - 15 SEC DELAY A BF DP07 KF170 + TIMER RESET CONTROL A BF TP06 + TIMER ToPo1 A BF TP06 BF ToPo2 A BF

LOC. TYPE

HDA SEQUENCING A
15 SEC TIMER
-E.C.-HISTORY-B-MACH.3350
FRAME 01
IBM CORP. SDD
DATE LAST EC
03-05-76 446704
P.N. 4291630

** IBM

CONFIDENTIAL

UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

6 TO 7 3 TO 2 0 TO 1 SET OR OR A FLOR KF220 ZB13D in-A1 F2j +INHIBIT HDA SEQ A-+ CONTROL RESET-- DRIVE START LATCH-- STATE 6-+INHIBIT HDA RECYCLE A TP-HDA SEQUENCE CK LTH A TP-- STATE 0--KE1 40BB6--KF1 40AD2--KF1 20AB6--KF220A99--KF1 40AF2--KF1 60AP2--KF1 60AP3-ZG05⊅ →ZB12Þ AR R + PWR ON RESET--KF1 40AB2-- CONTROL RESET--KF1 40AD6---KF220AA4---KF1 70AP6 -KF220AA8 ZB12D - RUN STATUS GOOD--KF1 30AE6 - STATE 3--KF220AA6

LOC. TYPE

HDA SEQUENCING A
BIT 1 LATCH
-E.C.-HISTORY B MACH.3350
FRAME 01
DATE LAST EC
03-05-76 446704
P.N. 4291631

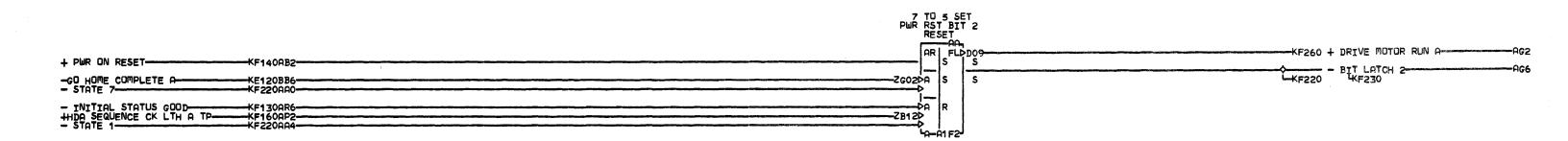
xox IBM

CONFIDENTIAL

UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **



LOC. TYPE A-A1F2 BC44 HDA SEQUENCING A
BIT 2 LATCH
-E.C.-HISTORY-B MACH.3350
FRAME 01 0
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000
03-05-76 446704
P.N. 4291632

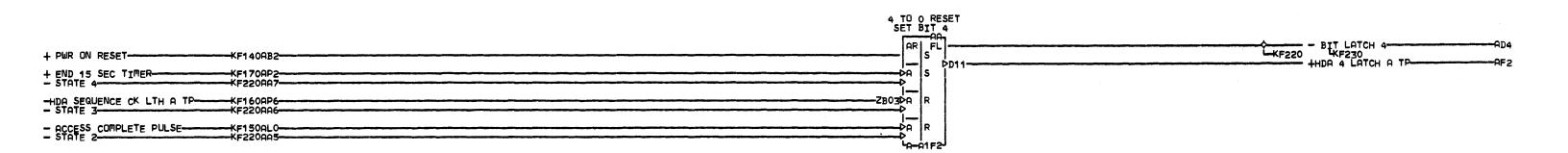
** IBM

CONFIDENTIAL

UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **



LOC. TYPE A-A1F2 BC44 HDA SEQUENCING A
BIT 4 LATCH
-E.C.-HISTURY B MACH.3350
FRAME 01 1
0
DATE LAST EC
03-05-76 446704
P.N. 4291633

** IBM

CONFIDENTIAL

UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

N LA-A1F2 €-KF160 4KF210 DCD - BIT LATCH 1-- BIT LATCH 2-- BIT LATCH 4--KF190AG4--KF200AG6--KF210AD4-L-KF140 KF160 KF1 50 -AA5 -KF210 - STATE 4-KF170 €KF140 KF120 4KF150 4KF200 +HDA READY A-KE140 KE150 KF140 + STATE 6-

> LOC. TYPE A-A1F2 BC44

HDA SEQUENCING A

--E.C.-HISTORY---B MACH.3350

FRAME 01

IBM CORP. SDD O

DATE LAST EC
03-05-76 446704

P.N. 4291634

CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** 000 KF230 -ZDO3DAR A -KH010 +HDA STATUS BIT O A-----+FMT ERROR RAS LATCH--ZBO4D A UR -KHO10 HHDA STAT BIT O A--SENSE STATUS 2 A-----KK170AE6-- BIT LATCH 4--KF210AD4--KH010 +HDA STATUS BIT 1 A-+ MOTOR AT SPEED RAS LATCH--SENSE STATUS 1 R -KH010 +HDA STATUS BIT 2 A-ZDO35 A OR - BIT LATCH 2--KF200AG6--KH010 HHDA STAT BIT 2 A-لم-142م + AIR RAS LATCH--KF120AL4 A DR DOS -KH010 +HDA STATUS BIT 3 A---- BIT LATCH 1--KF190AG4 -KH010 +HDA STAT BIT 3 A-ZDO30 LOC. TYPE A-A1F2 BC44 HDA SEQUENCING A

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-E.C.-HISTORY-B-MACH.3350

DATE LAST EC 03-05-76 446704

xox IBM CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED 000 KF240 THEREAFTER ** -ZD125 A OR J12--ZD045 -A-A1F2 -KF120AG2--KK170AD6-KHO20 +HDA STATUS BIT 4 A -KHO20 +HDA STAT BIT 4 A---10-01F2. -FIXED HEADS--KF110BE2--KHO20 +HDA STATUS BIT 5 A-AC2 ZDO4D I+ - INHIBIT RECYCLE--KF140AF6--KHO20 HHDA STAT BIT 5 A-----ZD030 - AIR SW----KF130AC2--KHO20 +HDA STATUS 5 A---KF140BE6--KHO20 +HDA STATUS BIT 6 A-AF2 -3330I--OFZDO4D A-A1F2J+ -3330II--KF140BG2--KHO20 HHDA STAT BIT 6 A----KH020 HHDA STATUS BIT 7 A-KH020 HHDA STAT BIT 7 A -NATIVE---KF140BB6 -SENSE STATUS 3 A--KK1700F6 P A OR -KF140BA6--KF140BB2-- SEL SET RD*WR-KHO20 HHDA STATUS 7 A - MOTOR AT SPEED--KF130AA2--> A OR | 11 -KHO20 HHDA STAT 7 A-LOC. TYPE A-A1F2 BC44 HDA SEQUENCING A -E.C.-HISTORY-B, MACH.3350 DATE LAST EC 03-05-76 446704 OOOCOPYRIGHT IBM CORP 1976

** IBM

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UNTIL 04-01-76

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THEREAFTER **

000 KF250

> LJC. TYPE A-A1F2 BC44

HDA SEQUENCING A
POWER ON RESET

-E.C.-HISTORY-E, MACH.3350
2
446704
446705

PRAME
01
5
0

DATE LAST EC
04-01-77
446708

P.N. 4291637

www IBM CONFIDENTIAL 000 KF260 UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** NOTE *EXIT* -kF200AG2-+ DRIVE MOTOR RUN A--YA071 -DRIVE MOTOR RUN A-SERV GND in-A1F2 NUTE *EXIT* +RD*WR CAPABLE A--KE150AB2--YA072 - READY LAMP ON A-NOTE *EXIT# -YA071 --HDA SEQ COMPLETE A-

+NOTOR AT SPEED A + STOP SW ON A +INHIBIT HDA RECYCLE A TP-+HDA SEQUENCE CK LTH A TP--KD570AF2--KF100AK6--KF140AF2-OR

LOC. TYPE A-A1F2 BC44

HDA SEQUENCING A

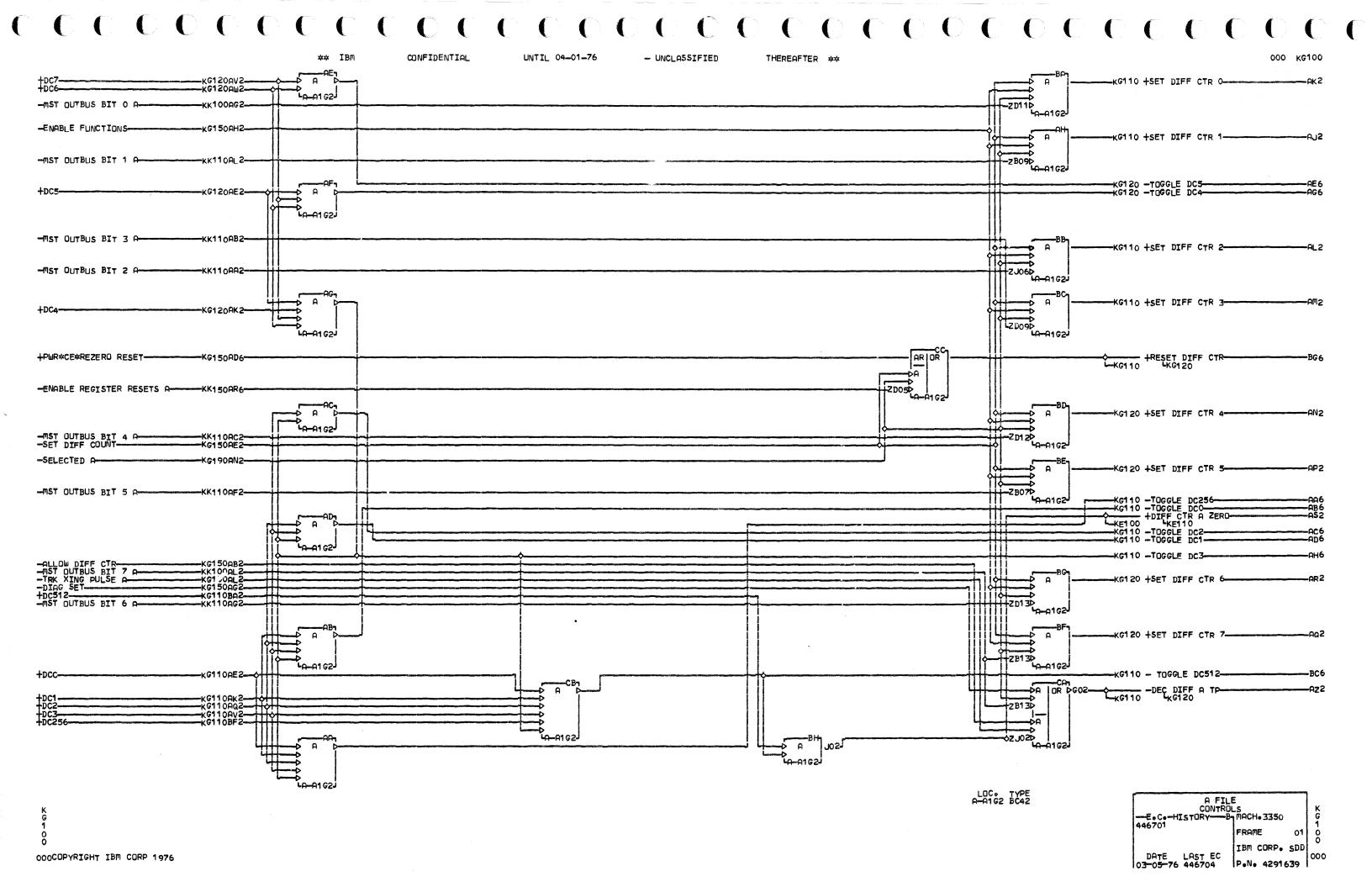
MAGNET DRIVERS

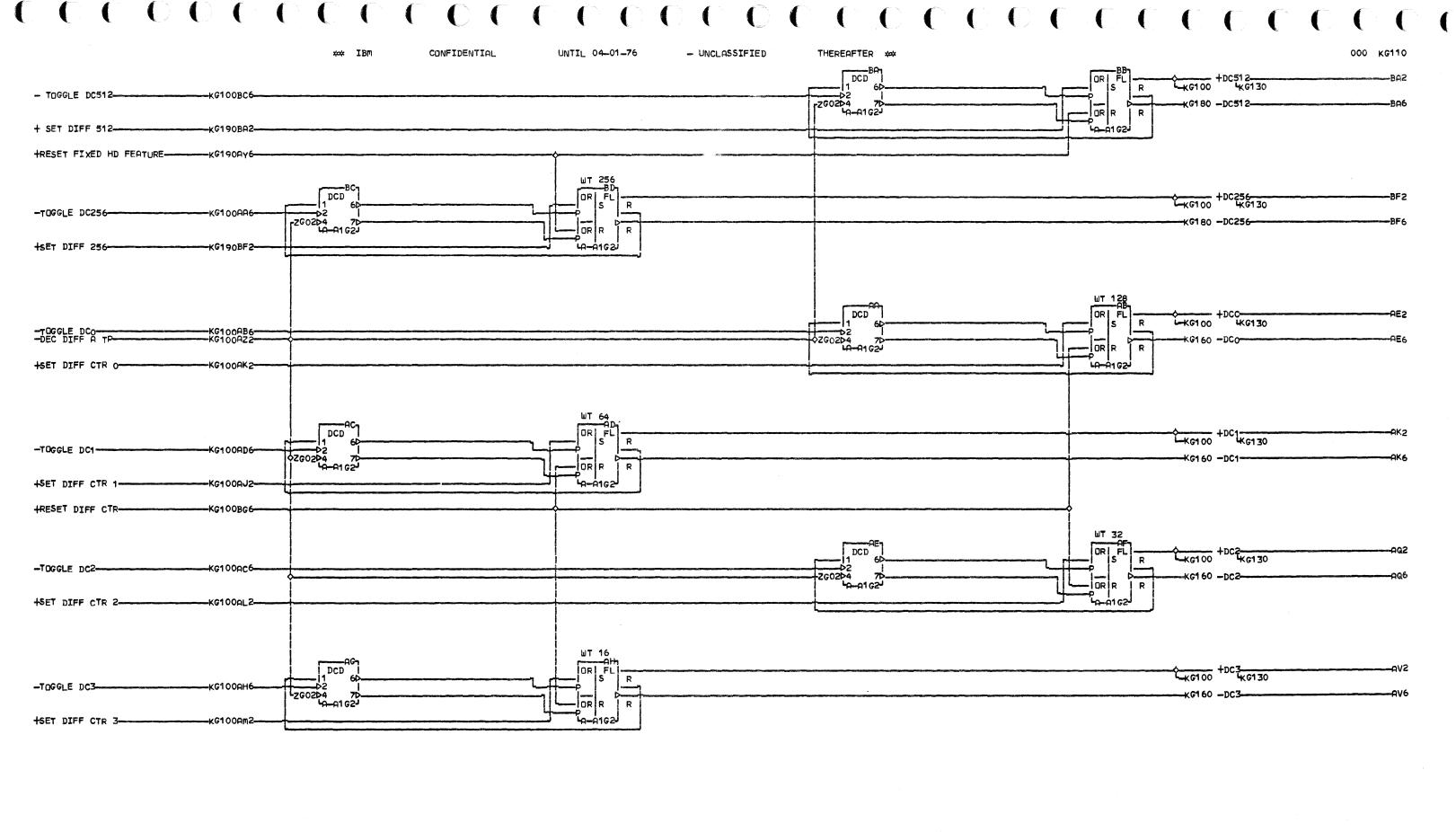
—E.C. HISTURY—E MACH.3350 DATE LAST EC 104-01-77 446708

NOTE B BOX HAS YB PAGES.

AE2 A-A1A5B12 AP2 A-A1A5D12 AY2 A-A1A5B13

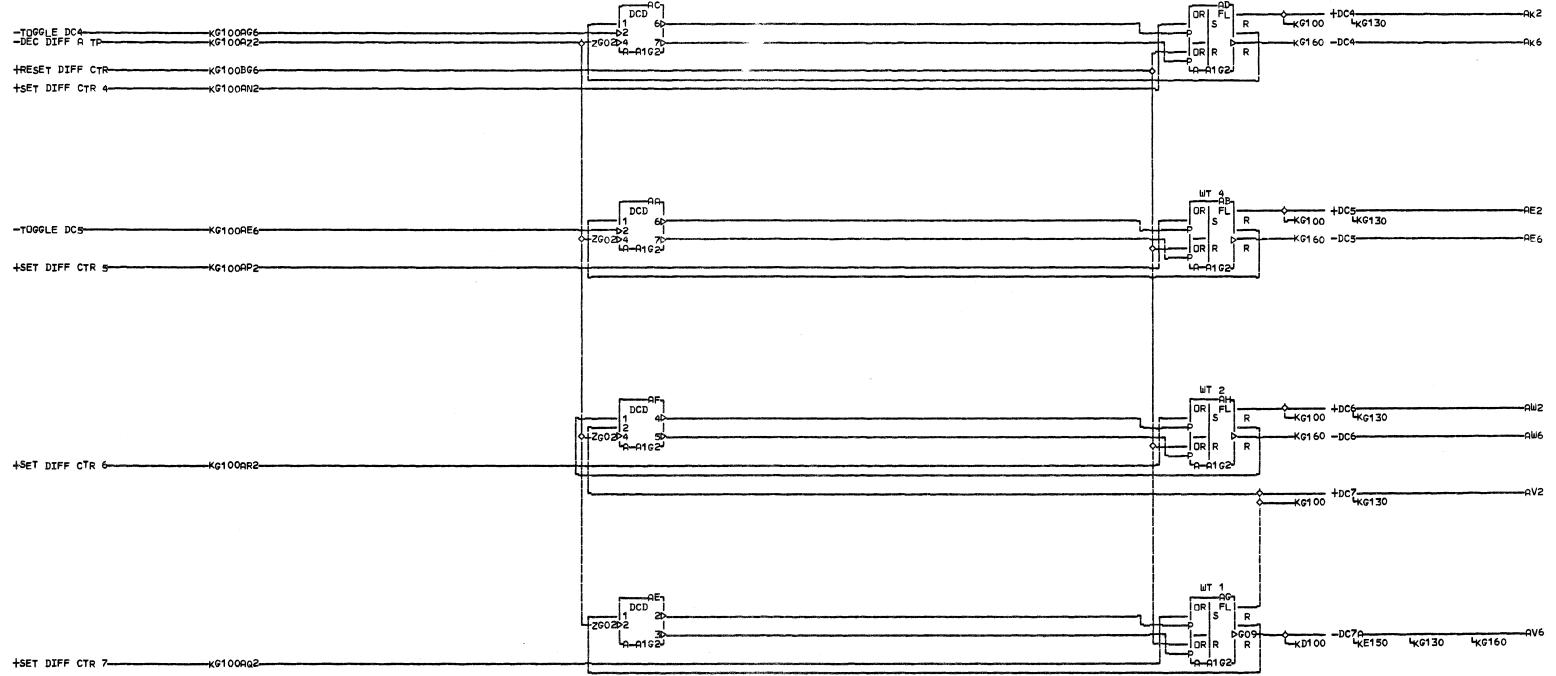
OOOCUPYRIGHT IBM CURP 1976

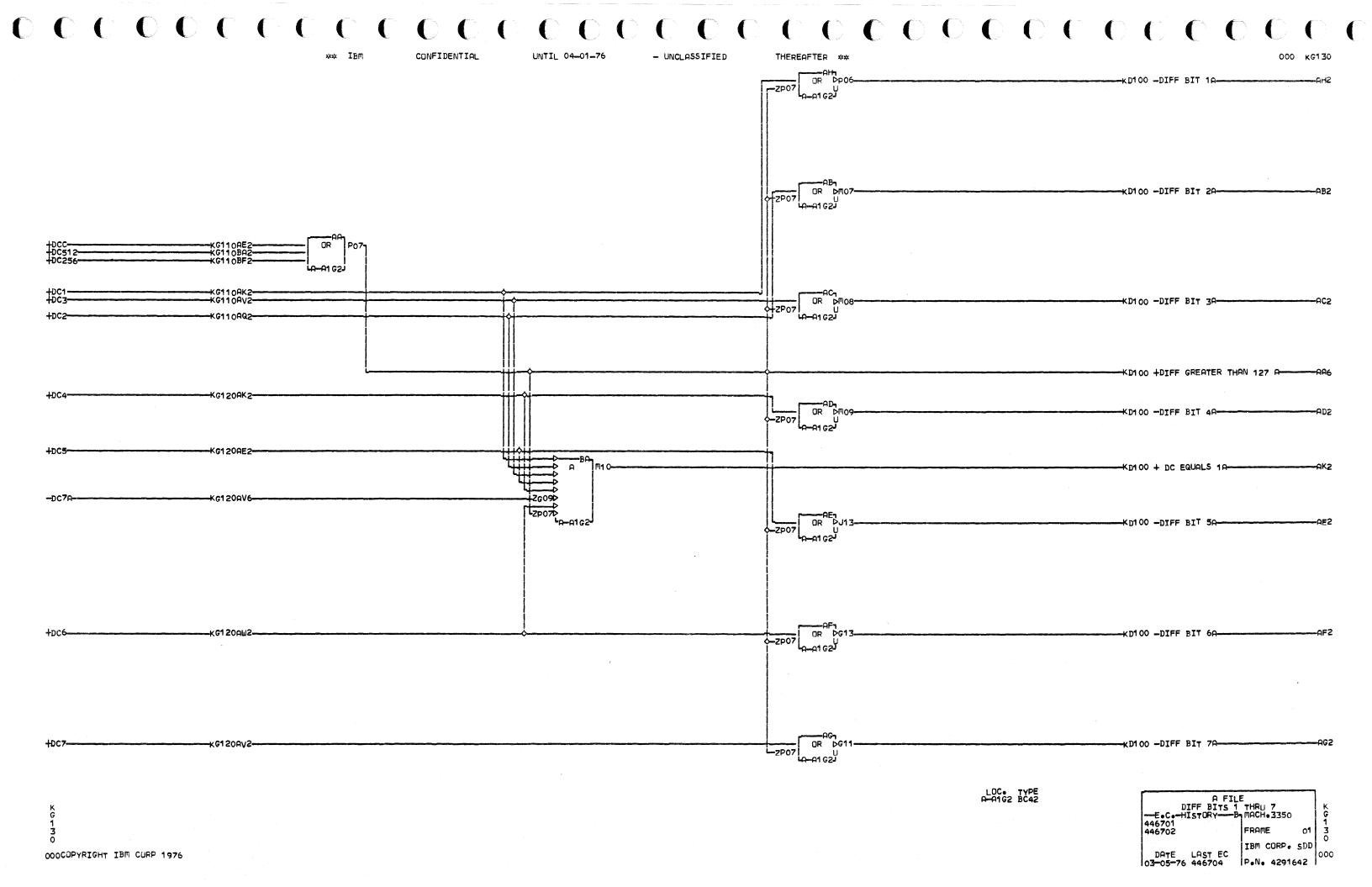




1 1 0 000COPYRIGHT IBM CORP 1976 A FILE
DIFF CTR 512 THRU 16
E-C-HISTORY B MACH-3350
446701 FRAME 01 1
DATE LAST EC 03-05-76 446704 P-N- 4291640

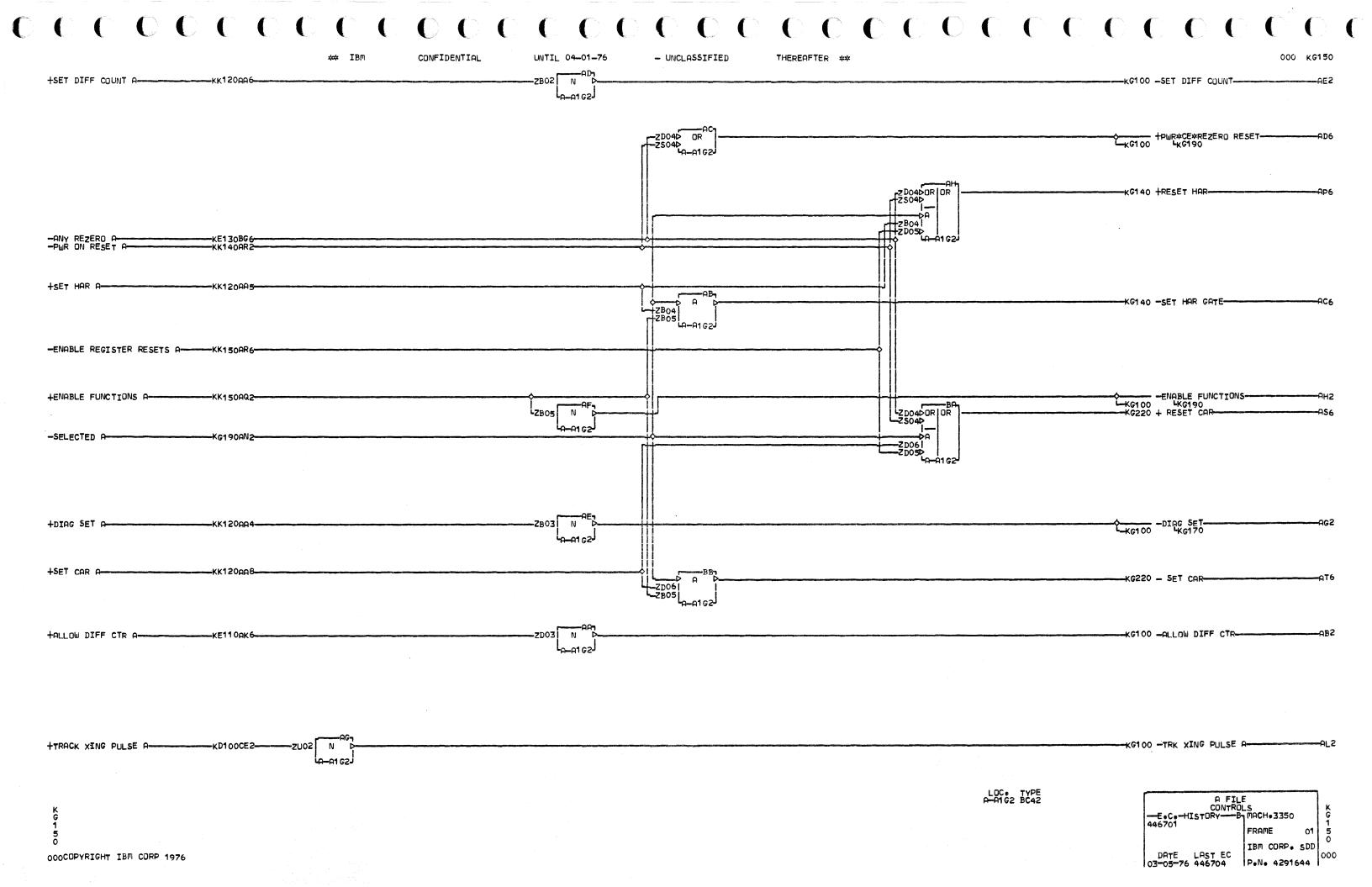
** IBM CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** 000 KG120 [DCDAC] OR FL - +DC4-KG130 `_KG100 ' —кс100AG6-—кс100AZ2-+G160 -DC4-OR R HRESET DIFF CTR--KG100BG6-



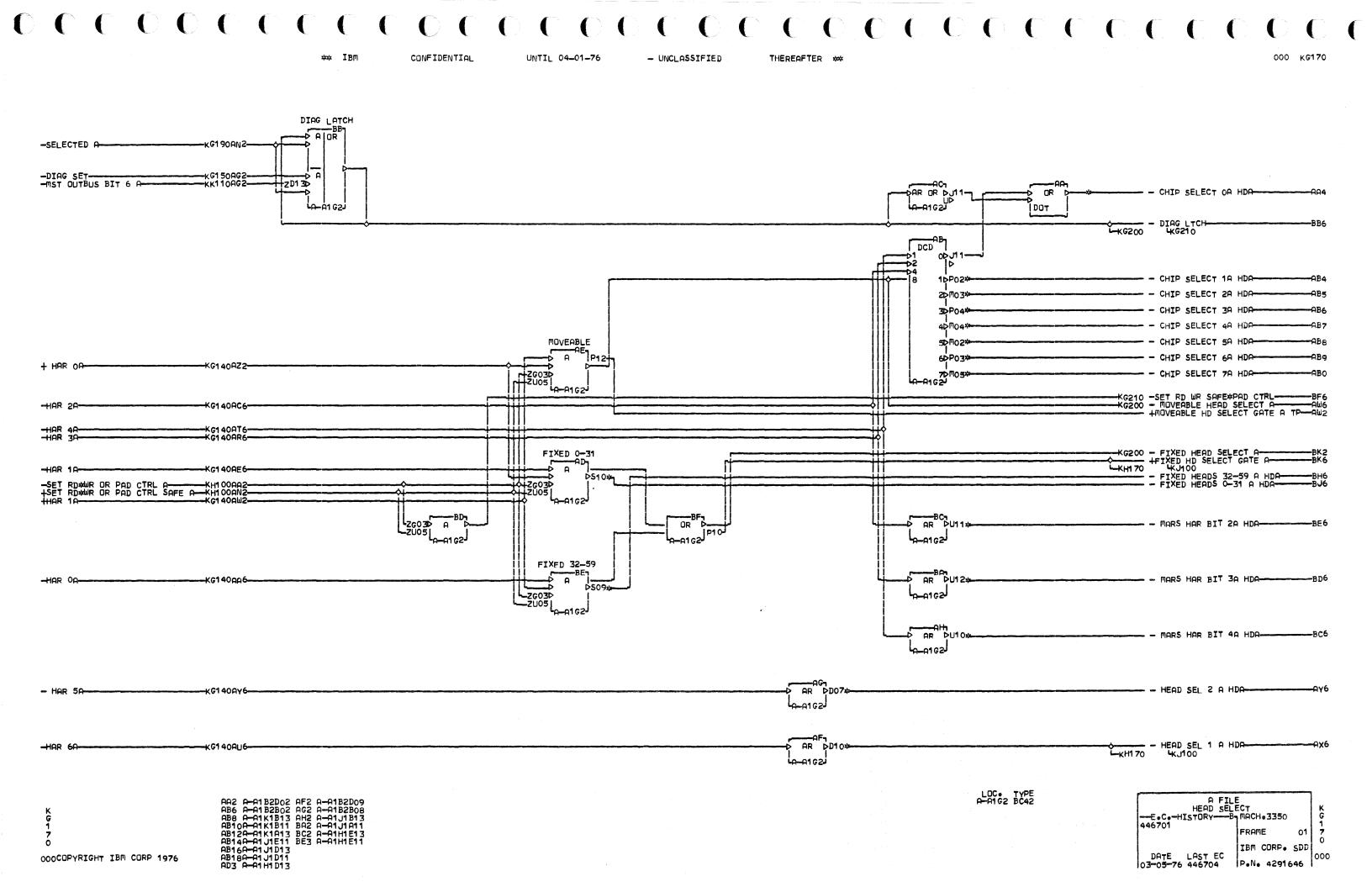
LOC. TYPE A-A1G2 BC42 

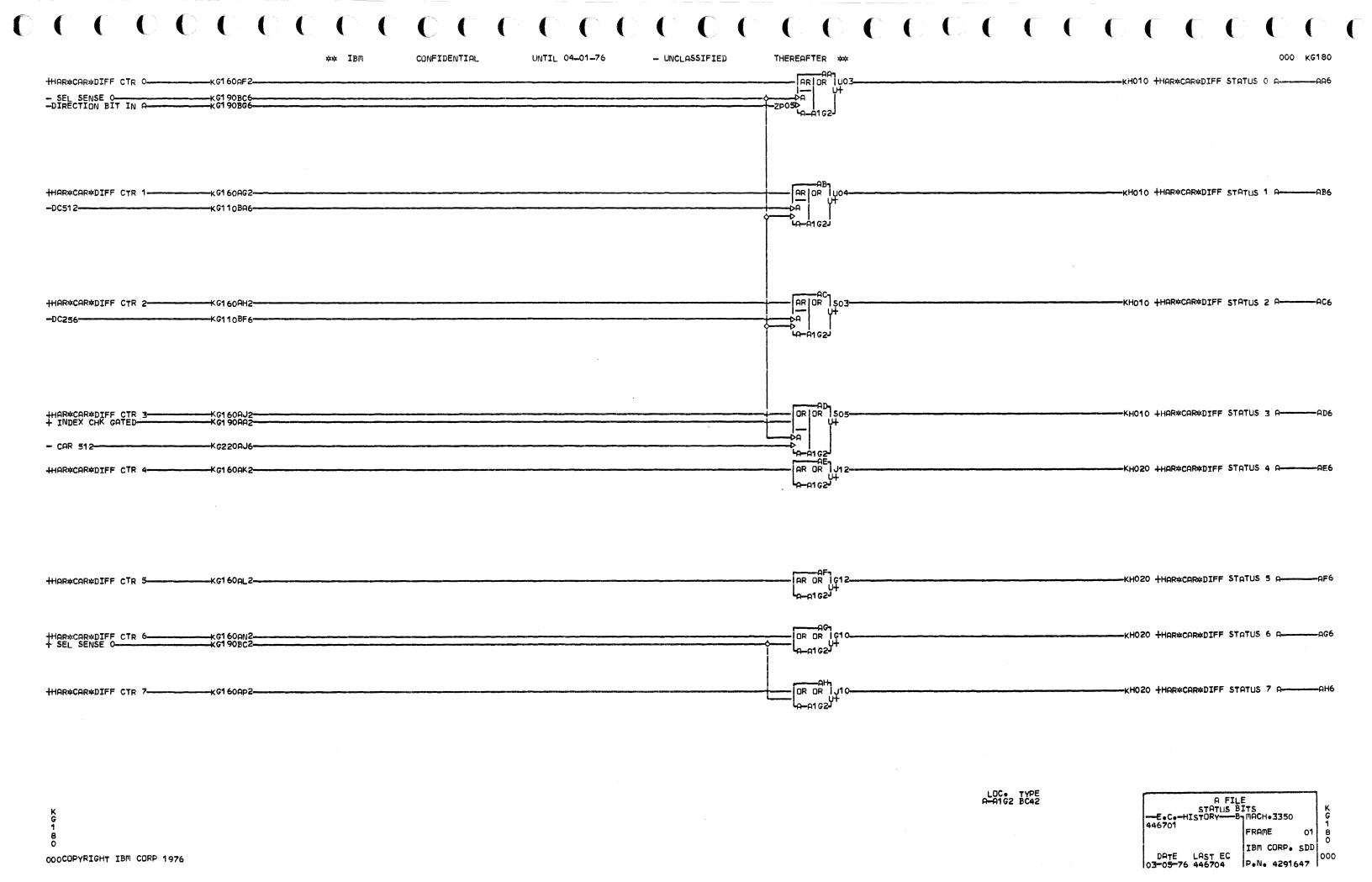
IBM CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** 000 KG140 HAR 0 -MST DUTBUS BIT O A-KK100AG2--MST OUTBUS BIT 1 A-HAR WT 32 KG160 -MST OUTBUS BIT 2 A--KK110AA2-HAR WT 16 - HAR 3A---KG160 -MST OUTBUS BIT 3 A-AR R A-A1G2 HAR WT 4 HAR 40---KK110AC2---KG150AC6---KG150AP6-HAR WT 2 -MST OUTBUS BIT 5 A-KK110AF2 - AR R G2 HAR WT 1 -MST DUTBUS BIT 6 A-KK110AG2--KG160 -HAR 7A--MST OUTBUS BIT 7 A--KK100AL2-LOC. TYPE A-A1G2 BC42 A FILE -E.C.-HISTORY-B MACH.3350 OOOCOPYRIGHT IBM CORP 1976 P.N. 4291643

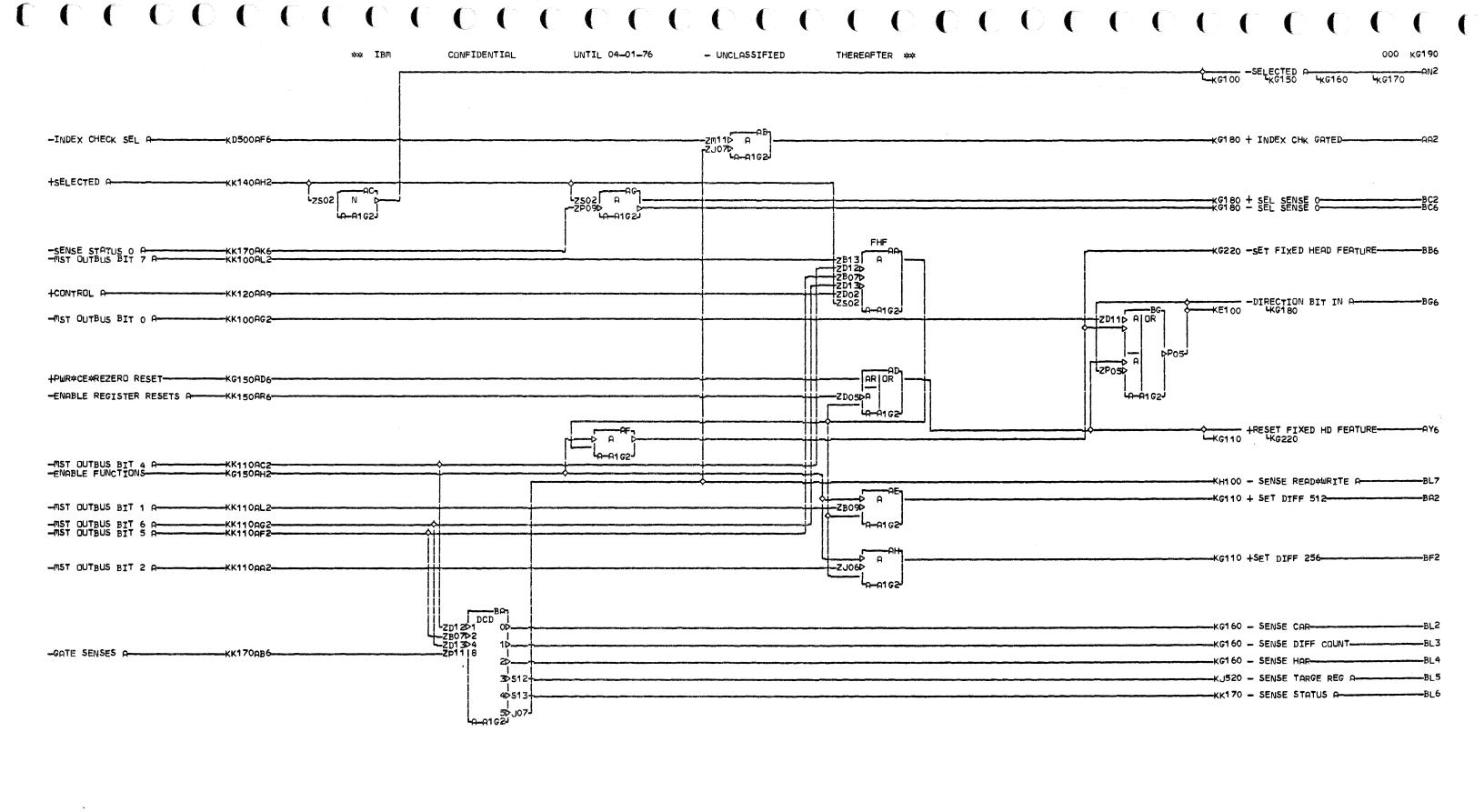
03-05-76 446704



** IBM CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED THEREAFTER ** 000 KG160 -DCO----KG110AE6--KG180 +HAR*CAR*DIFF CTR 0---- CAR 256--KG220AH6--KG180 +HAR*CAR*DIFF CTR 1-----KG140AA6-HAR OA-KG220AG6--KG110AK6--KG140AE6--HAR 2A---KG1 40AC6--KG180 +HAR*CAR*DIFF CTR 2--KG220AF6--KG180 +HAR*CAR*DIFF CTR 3--KG110AQ6--KG140AR6--KG220AE6--KG190BL4--KG110AV6--KG190AN2--DC3-SELECTED A-- SENSE DIFF COUNT--DC4--KG120AK6--KG180 +HAR*CAR*DIFF CTR 4---KG220AD6--KG180 +HAR*CAR*DIFF CTR 5------KG1 40AT6--HAR 48---KG220AC6---KG140AY6---KG120AE6---KG120AШ6--KG180 +HAR*CAR*DIFF CTR 6----**-**DC6---KG220AB6--KG180 +HAR*CAR*DIFF CTR 7----KG1 40AU6-- CAR 2--KG140AB6-ZG090A LA-0162 A FILE
HAR*DIFF CTR 0 THRU 7 LOC. TYPE A-A1G2 BC42 -E.C.-HISTORY-IBM CORP. SDD DATE LAST EC 03-05-76 446704 OOOCOPYRIGHT IBM CORP 1976 PeNe 4291645







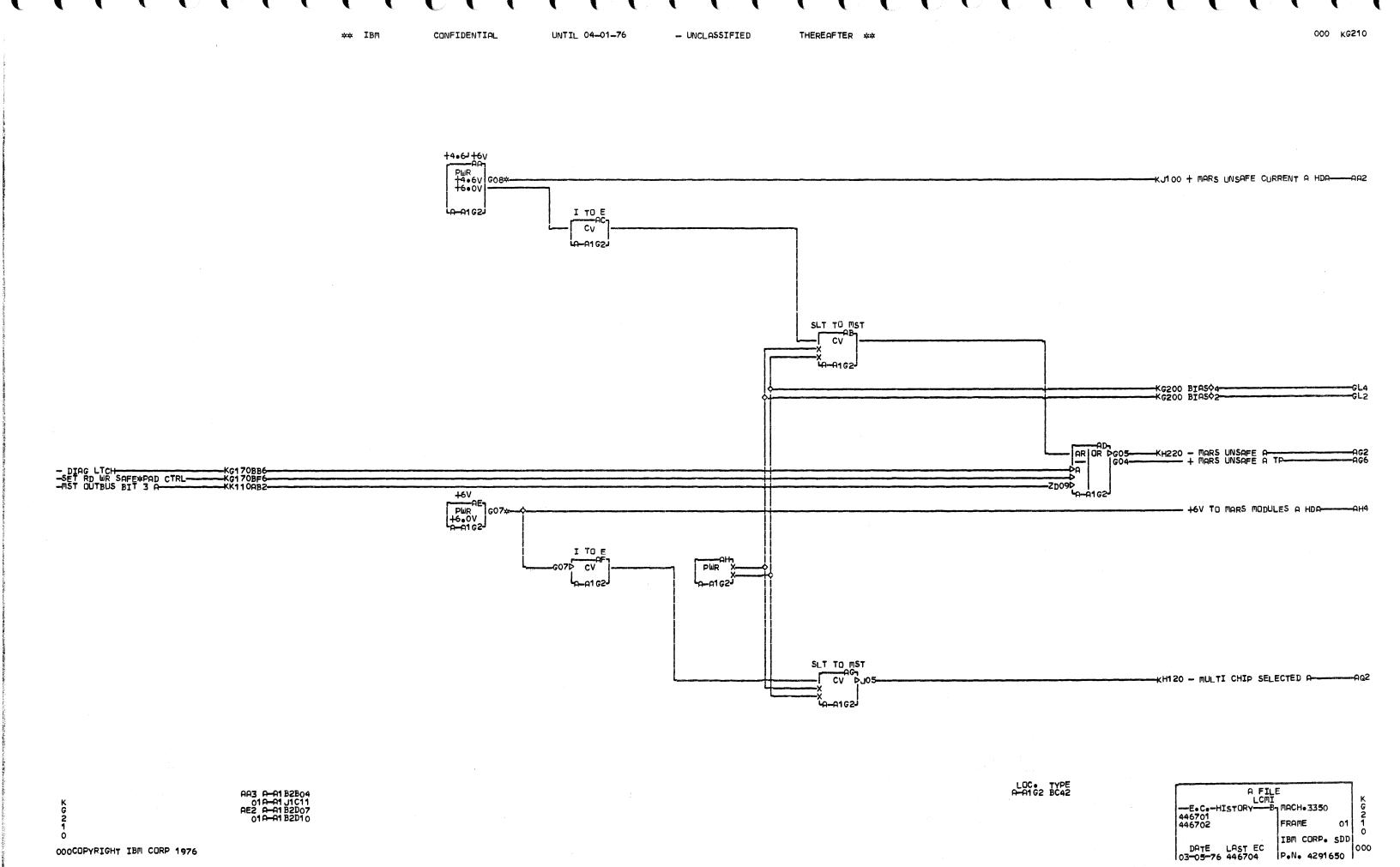
LDC. TYPE

FILE DIR BIT ## A FILE DIR BIT ## A FILE DIR BIT ## A FILE ## A FILE DIR BIT ## A

K G 1 9 0

OOOCOPYRIGHT IBM CORP 1976

CONFIDENTIAL 000 KG200 UNTIL 04-01-76 - UNCLASSIFIED ** IBM THEREAFTER ** - MOVEABLE HEAD SELECT A-- + WRITE SELECT MOVEABLE A HDA-BR4 ZU070 ZS071 DA ZU07b → ZS07 -KJ100 - SEL IW A-+6V PWR +6.0V LA-9162J CV OR LA-A162 AR - DIAG LTCH--KG170BB6 PCSIY | |PCSIY | |A-A1G2 SLT TO MST BIASÓ2—
- FIXED HEAD SELECT A-WRITE GATE CONTROL A+WRITE GATE SEL OR PAD A--KG210GL2--KG170BK2--KH160AH6-CV -KH140 - HEAD SHORT A-KH160BD2 JK BB ****** BIAS\$4--KG210GL4-R BE 18.2 A-A162 PCSIY) + WRITE SELECT FIXED A HDA-OR DOT I TO E +6V PWR +6.0V A-A1G2 CV OR LA-A162j LUC. TYPE AA2 A-A1 B2D04 AF2 A-A1 B2B09 IBM CORP. SDD DATE LAST EC 03-05-76 446704 OOOCOPYRIGHT IBM CORP 1976 PeNe 4291649



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CONFIDENTIAL

UNIIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

CAR 512 -KG180 - CAR 512--SET FIXED HEAD FEATURE-KG190BB6--ZD090 +RESET FIXED HD FEATURE-KG190AY6-CAR 256 A I FLO -KG160 - CAR 256---MST DUTBUS BIT O A---KK1 00AG2--AR R CAR 128 A FLA -KG160 - CAR 128--MST OUTBUS BIT 1 A--MST OUTBUS BIT 3 A--KK110AL2--KK110AB2-AR R CAR 64 A I FLO -KG160 - CAR 64--MST OUTBUS BIT 2 A--KK110AA2-ARR CAR 32 A | FLO -KG160 - CAR 32-TZDO90 - SET CAR--KG1 50AT6-AR R A-A1G2 CAR 16 -KG160 - CAR 16--ZD12D -MST OUTBUS BIT 4 A------KK110AC2-AR R A-A1G2 CAR 8 -KG160 - CAR 8--MST OUTBUS BIT 5 A--KK110AF2--KG150AS6-ARR CAR 4 A I FLA -KG160 - CAR 4--MST OUTBUS BIT 6 A--KK110AG2-ARIR CAR 2 KG160 - CAR 2 -MST OUTBUS BIT 7 A----KK1 00AL2-

LOC: TYPE

CYLINDER ADDRESS REGISTER

—E.C. HISTORY B MACH.3350

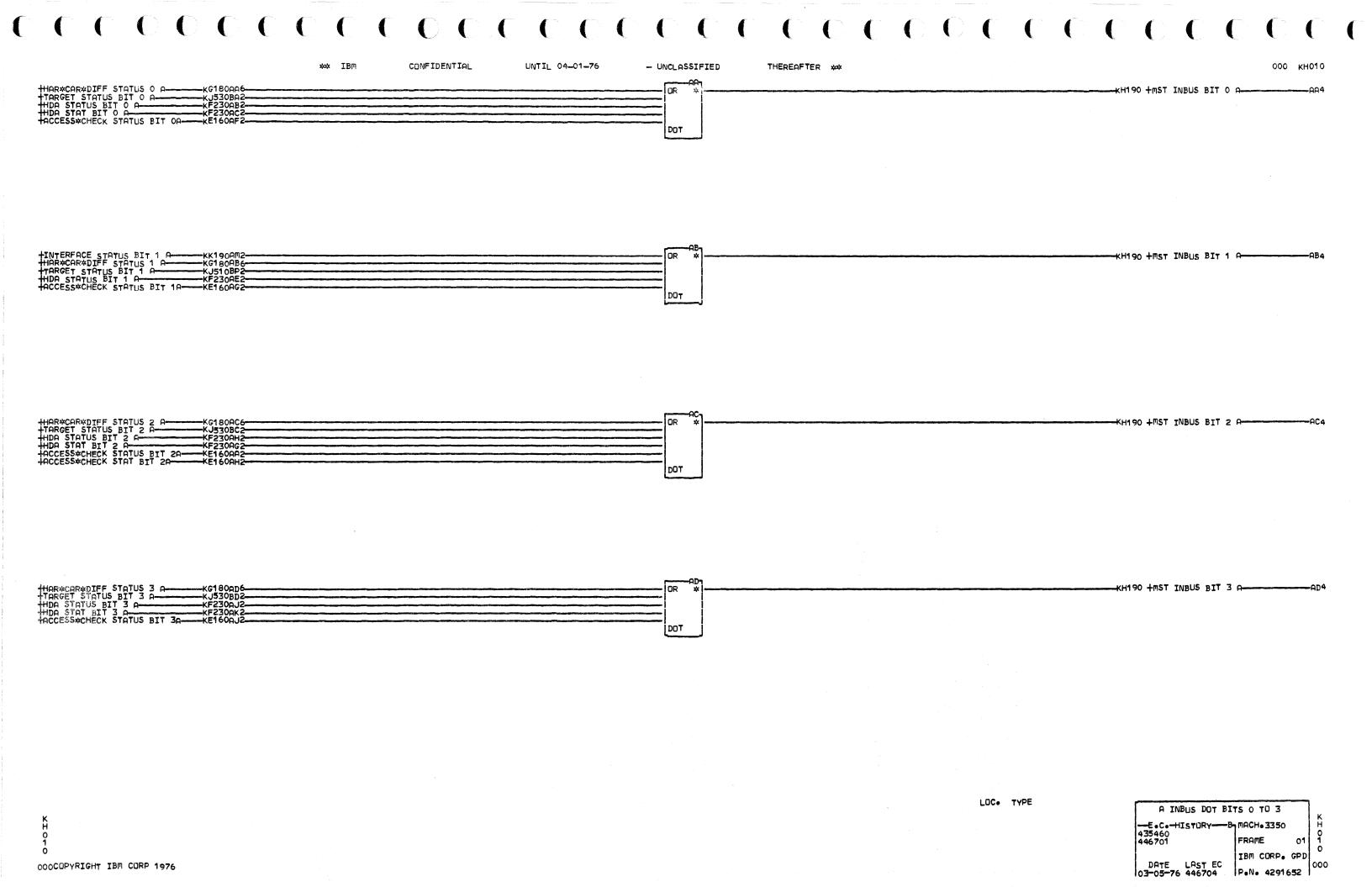
446701 FRAME 01

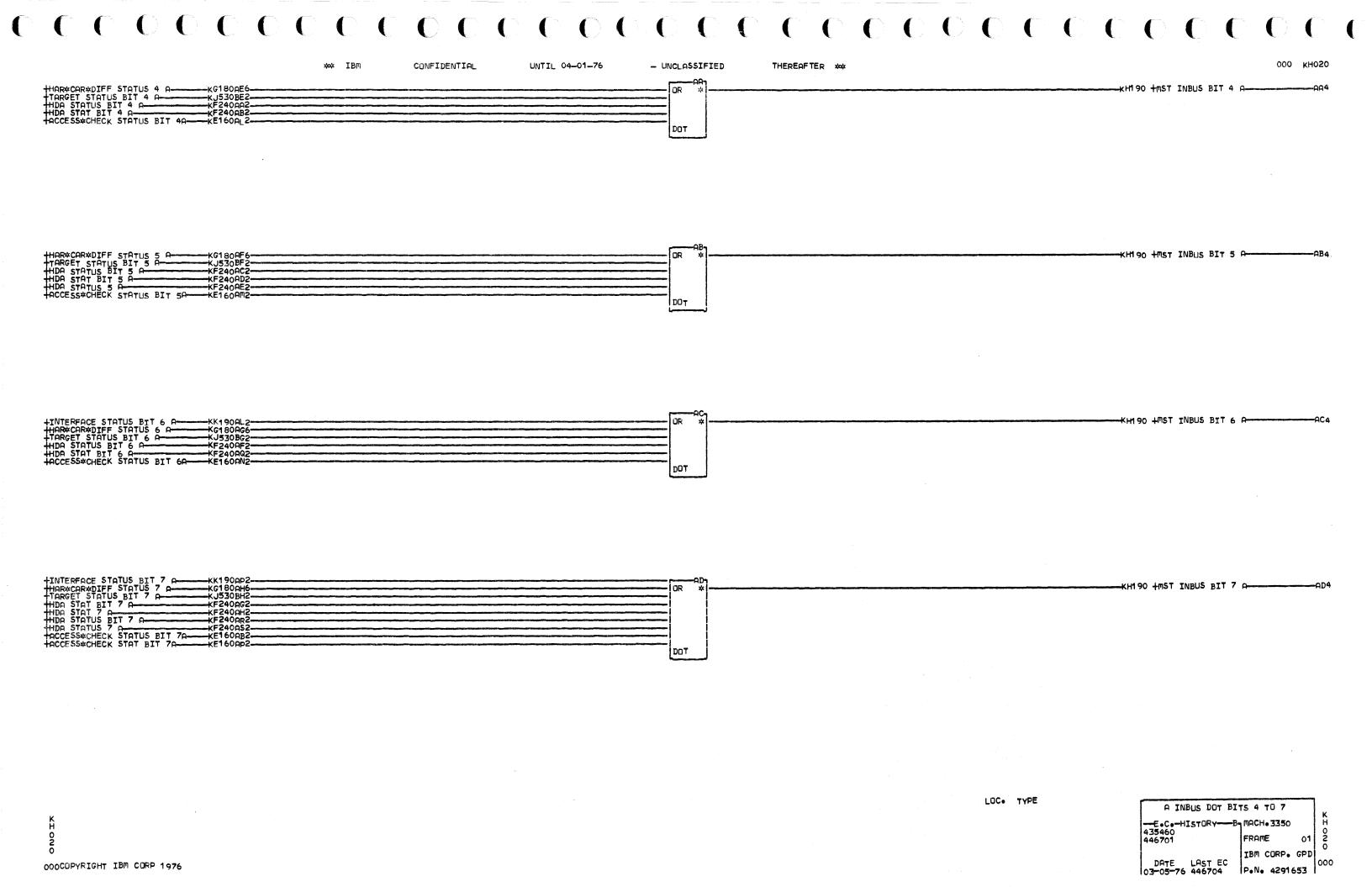
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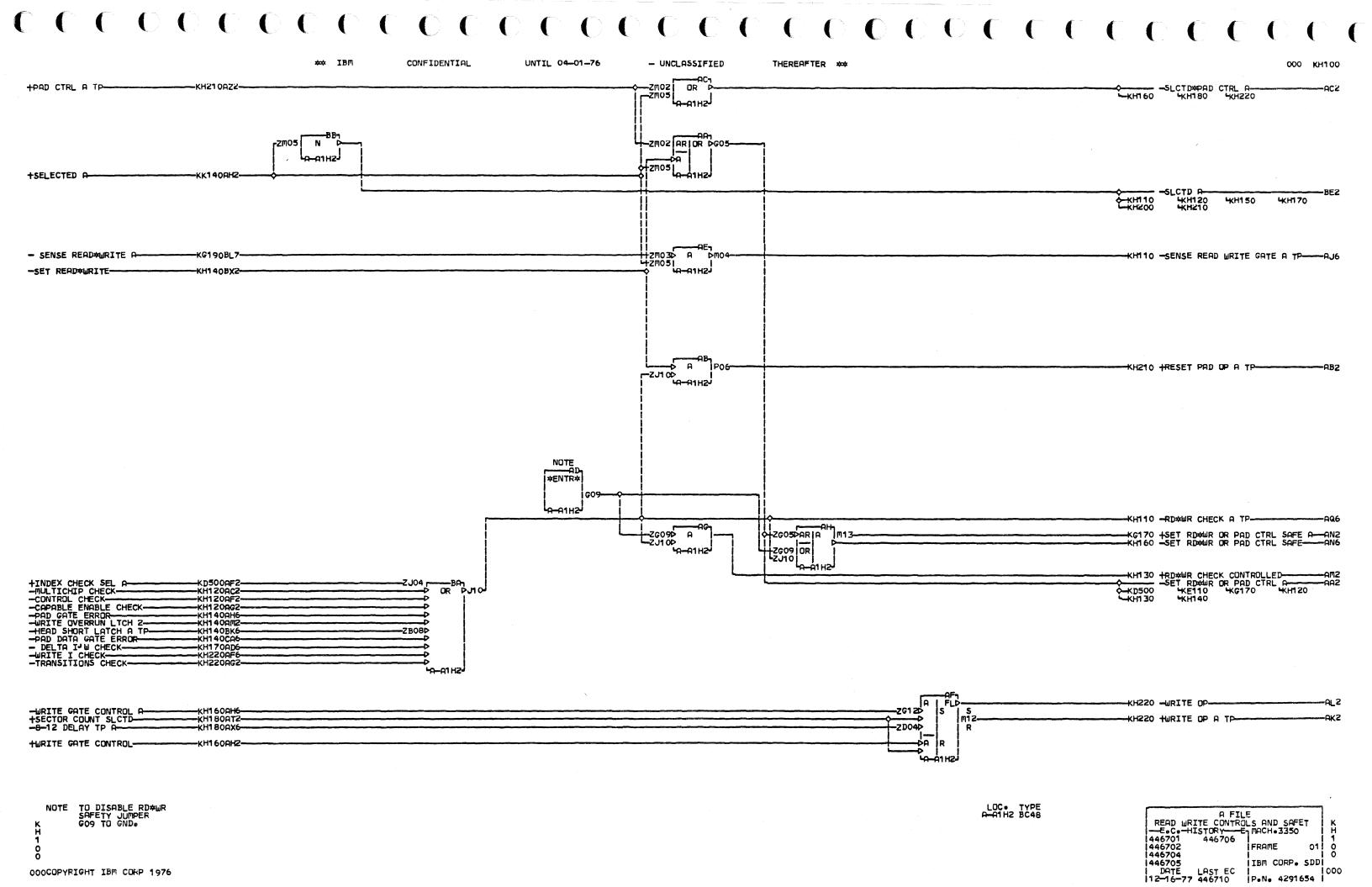
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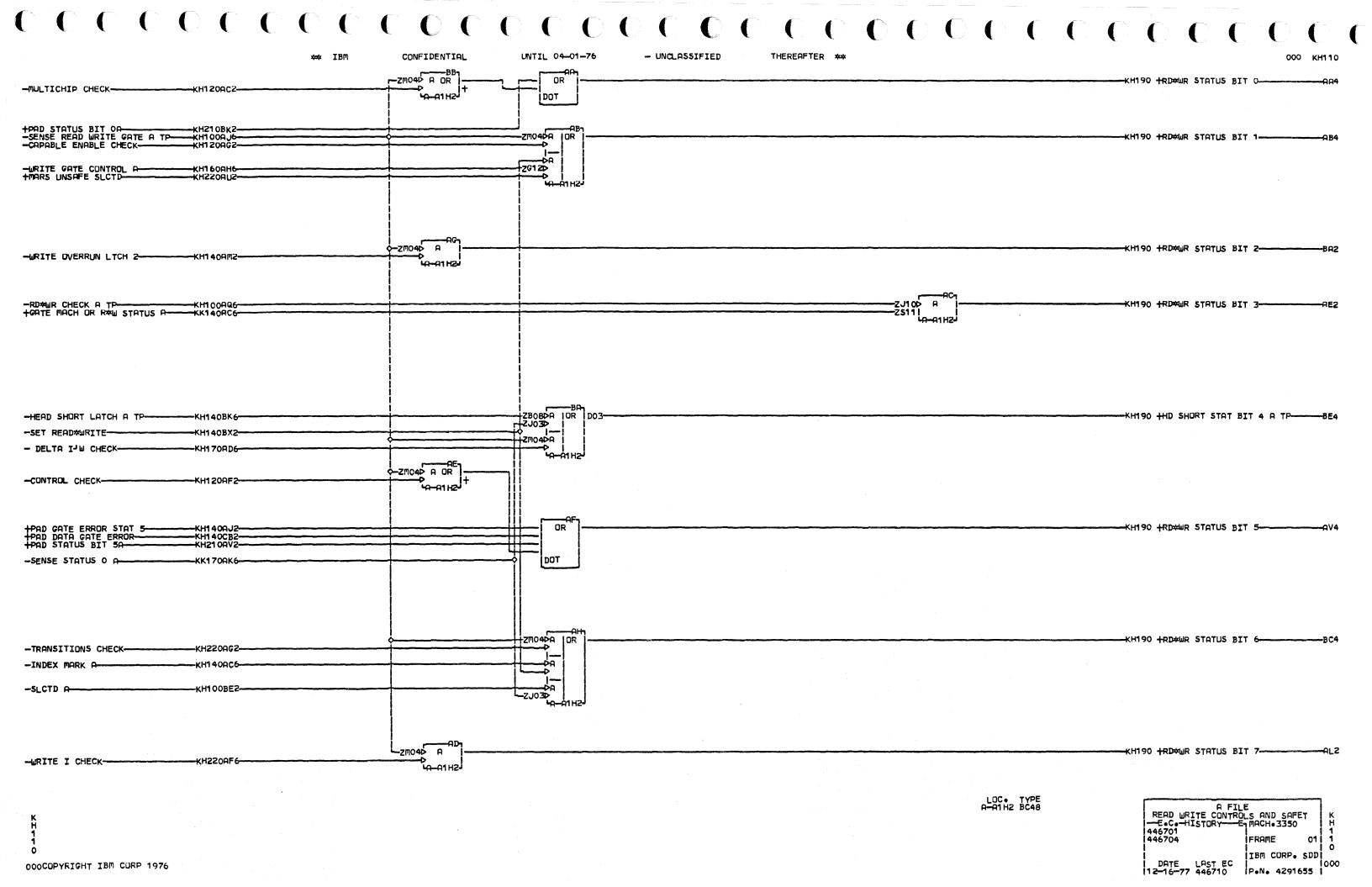
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03-05-76 446704 P.N. 4291651

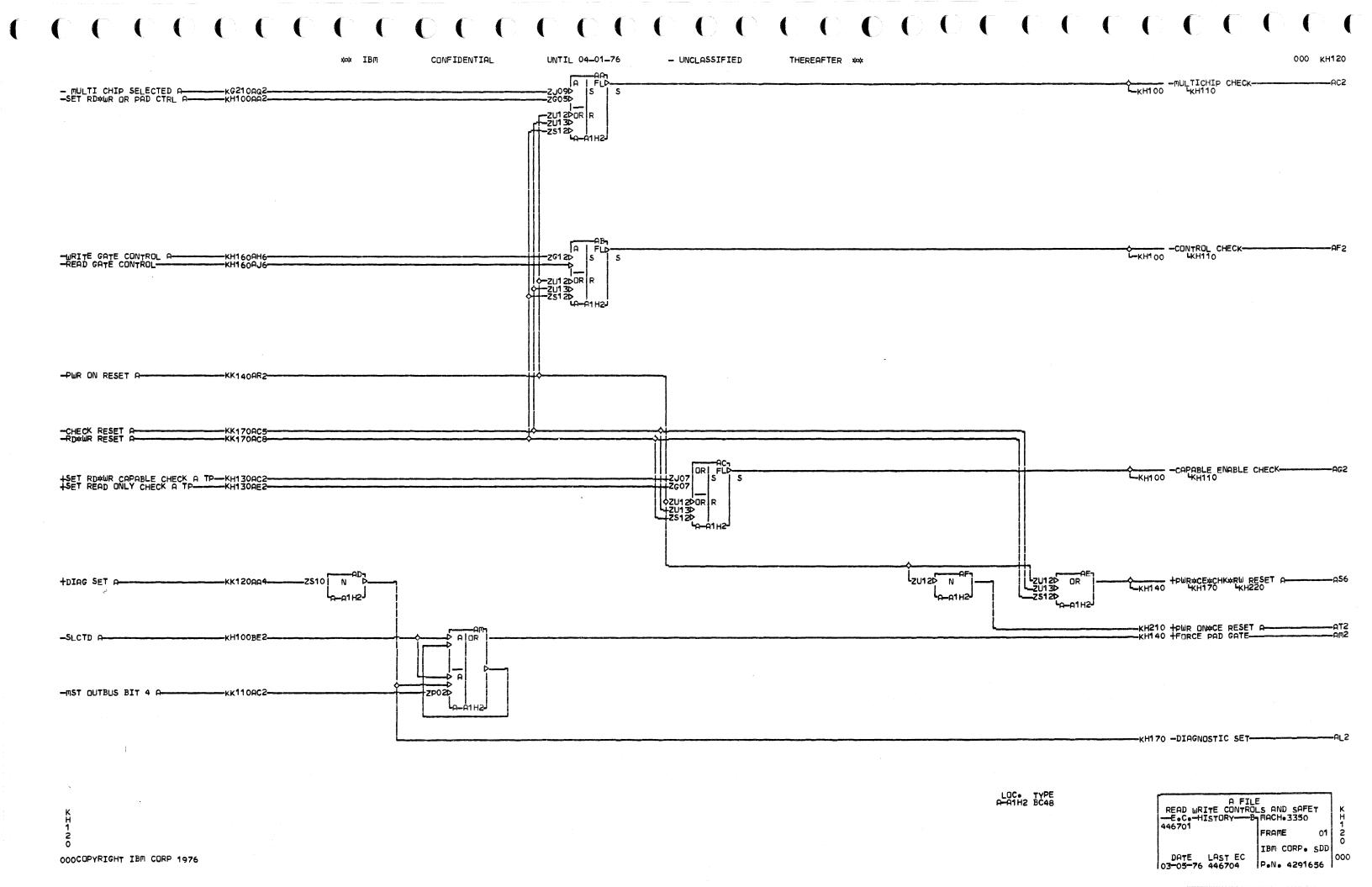
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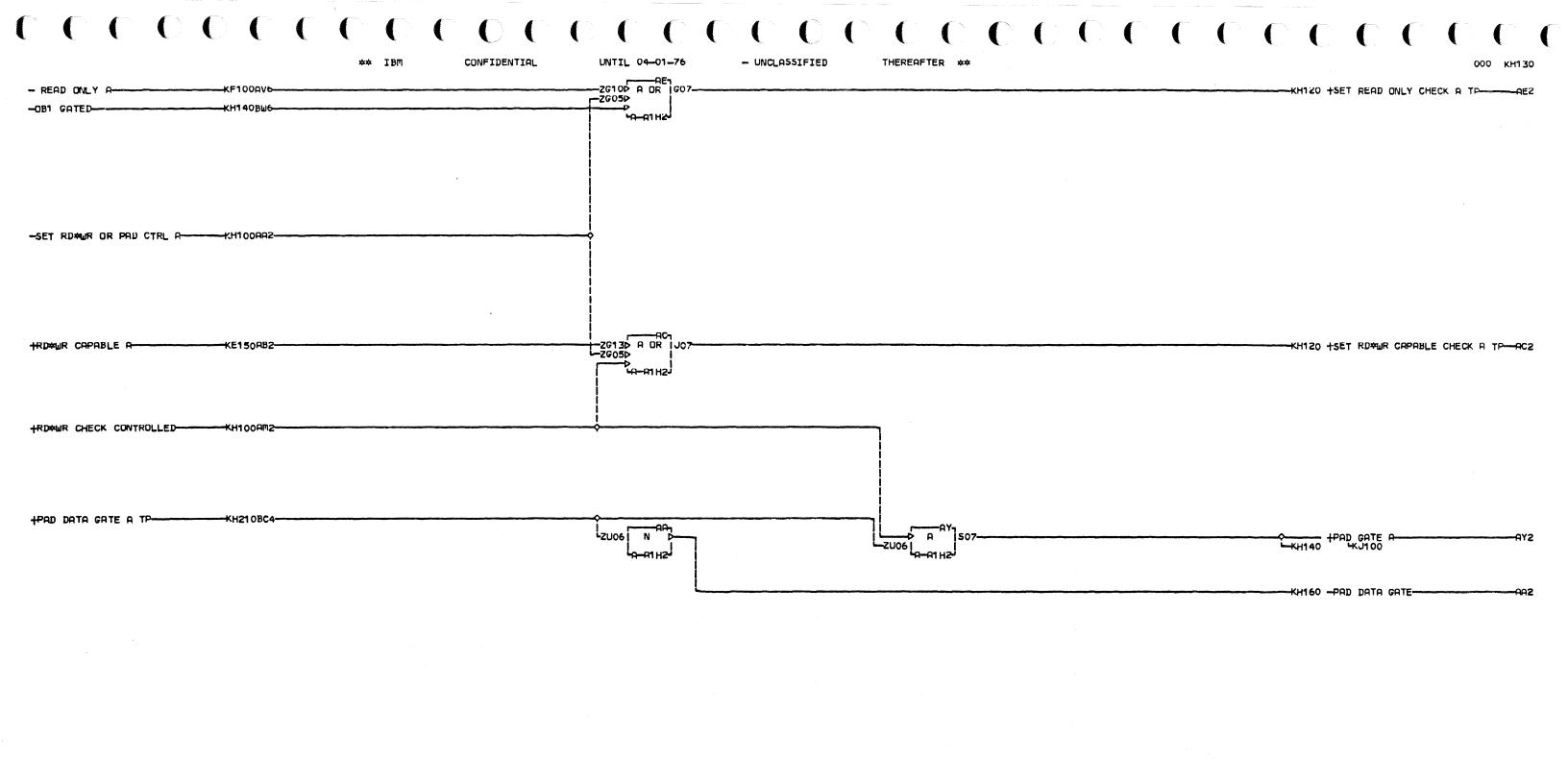






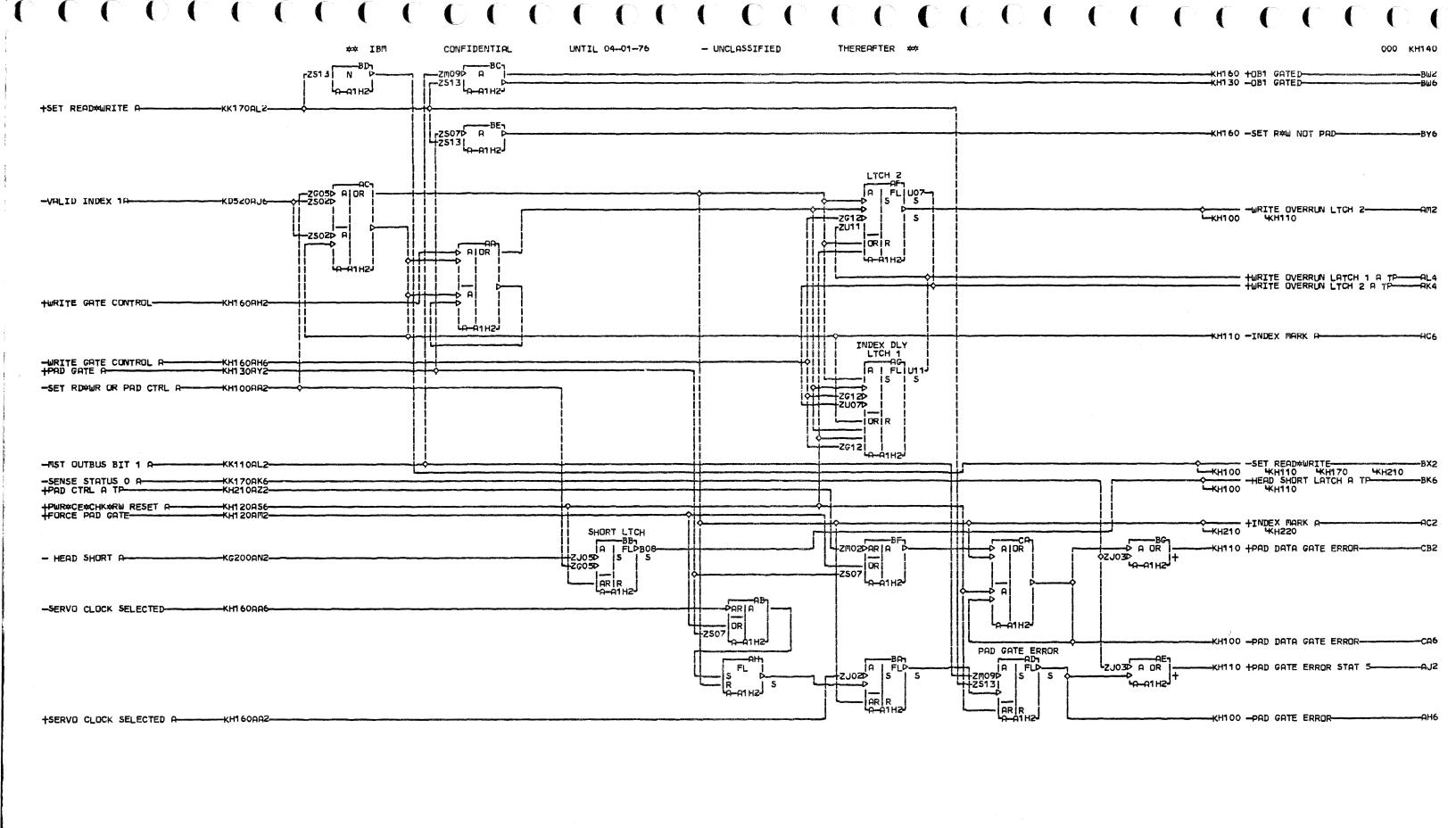






LOC. TYPE

READ WRITE CONTROLS AND SAFET K
-E.C. HISTORY E, MACH. 3350 H
446701 FRAME 01 3
446704 IBM CORP. SDD
DATE LAST EC 12-16-77 446710 P.N. 4291657



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WRITE OVERRUN DETECTOR

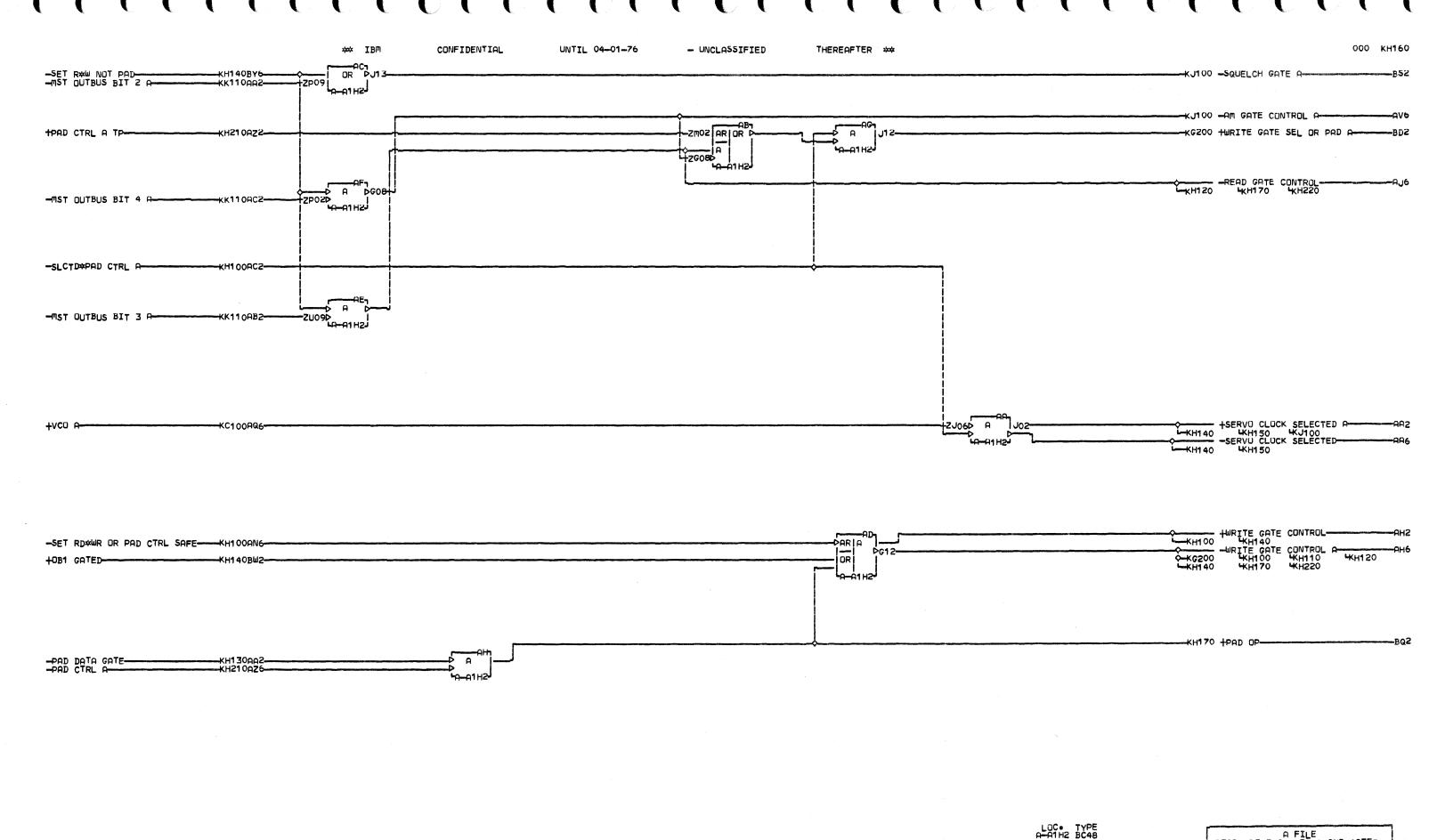
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446704 IBM CORP. GPD
DATE LAST EC
12-16-77 446710 P.N. 4291658

LOC. TYPE

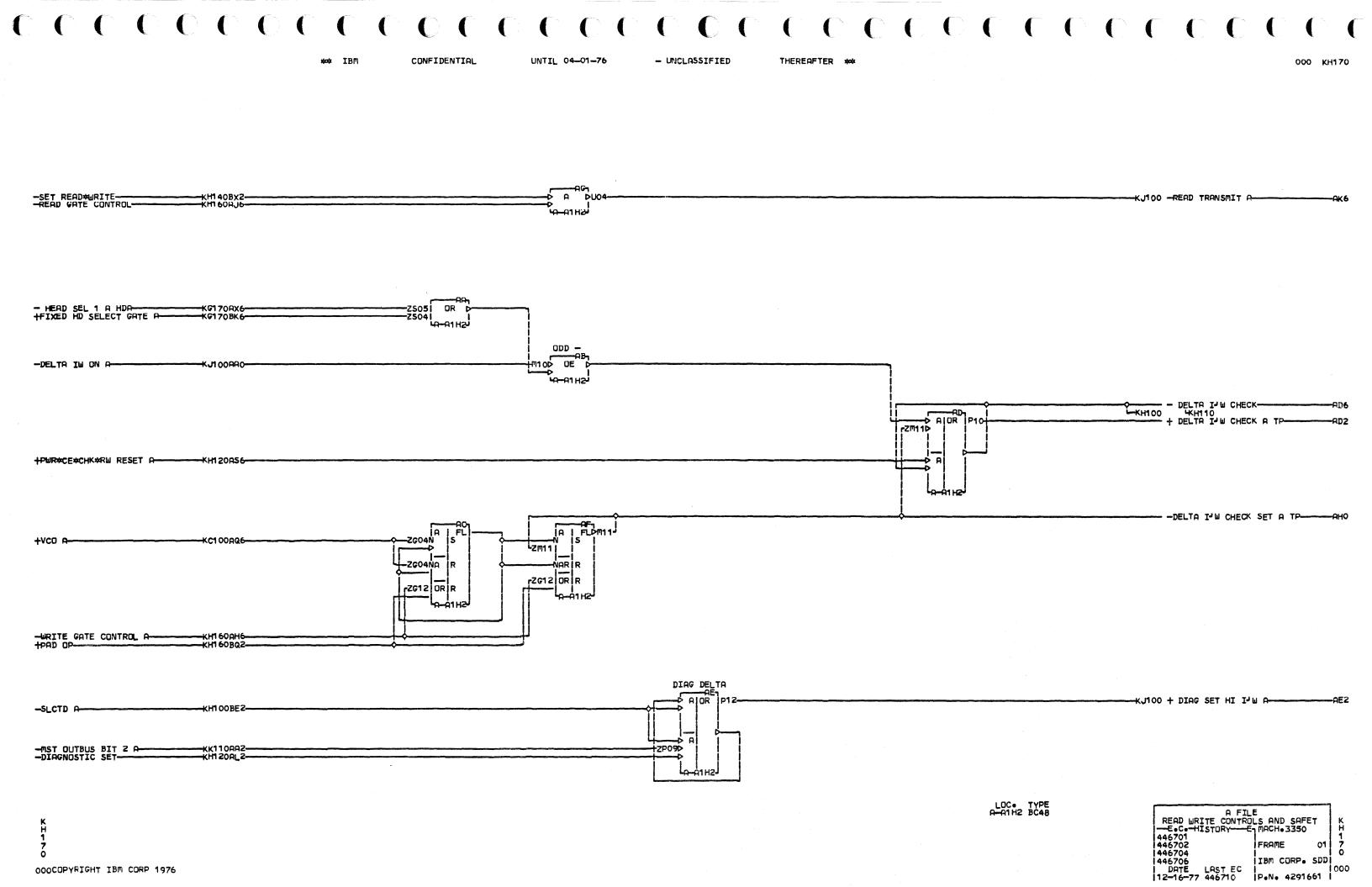
- UNCLASSIFIED 000 KH150 ×× IBΠ CONFIDENTIAL UNTIL 04-01-76 THEREAFTER ** Com A-LD LZ705 -- WL180 +PLO PULSE DRIVER A----SLCTD A--KH1 00BE2-A-LD -WL180 -PLO PULSE DRIVER A-----SERVO CLOCK SELECTED--KH1 60AA6-ندA-A1H2 +SERVO CLOCK SELECTED A-KH1 60AA2-2391049 C 18PF 49-41H2

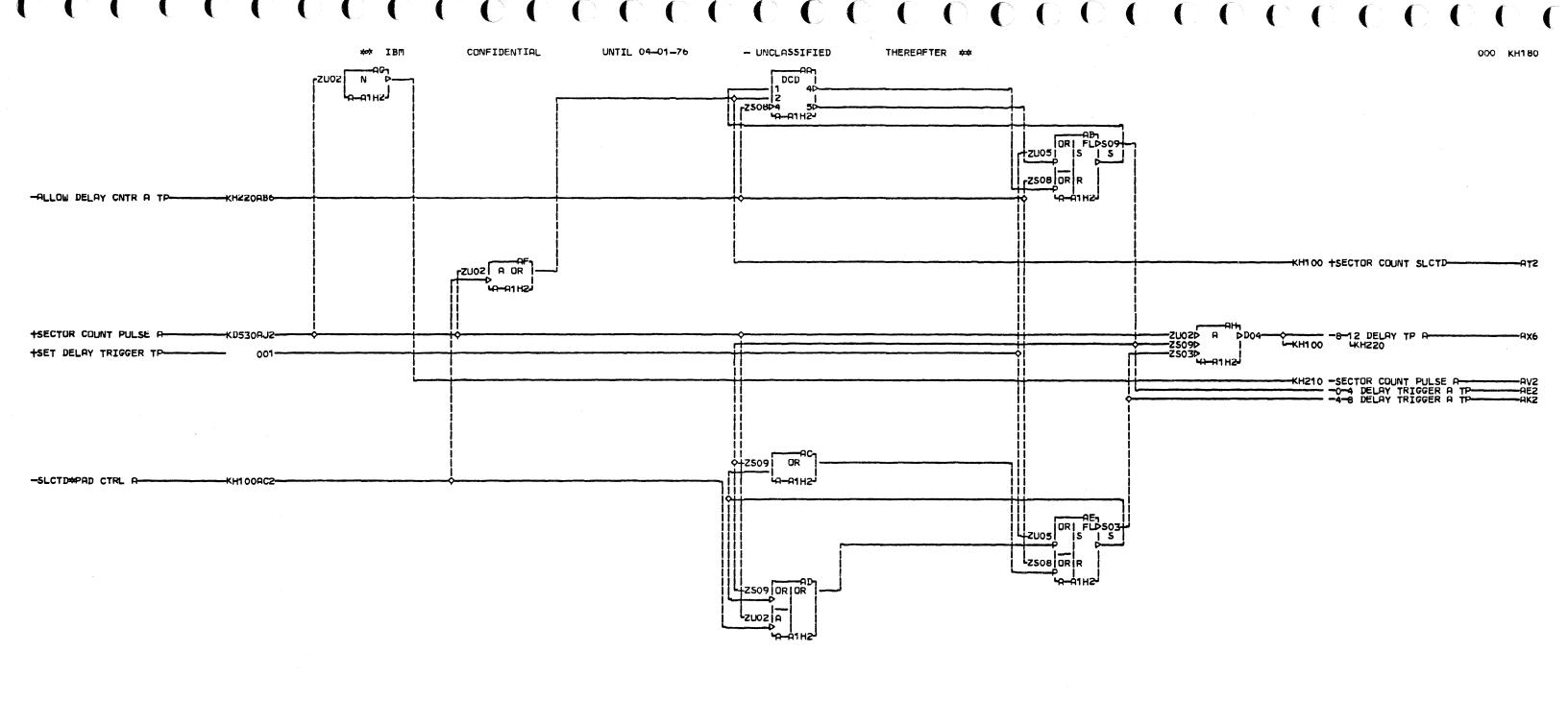
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446701 FRAME 01
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DATE LAST EC
03-05-76 446704 P.N. 4291659



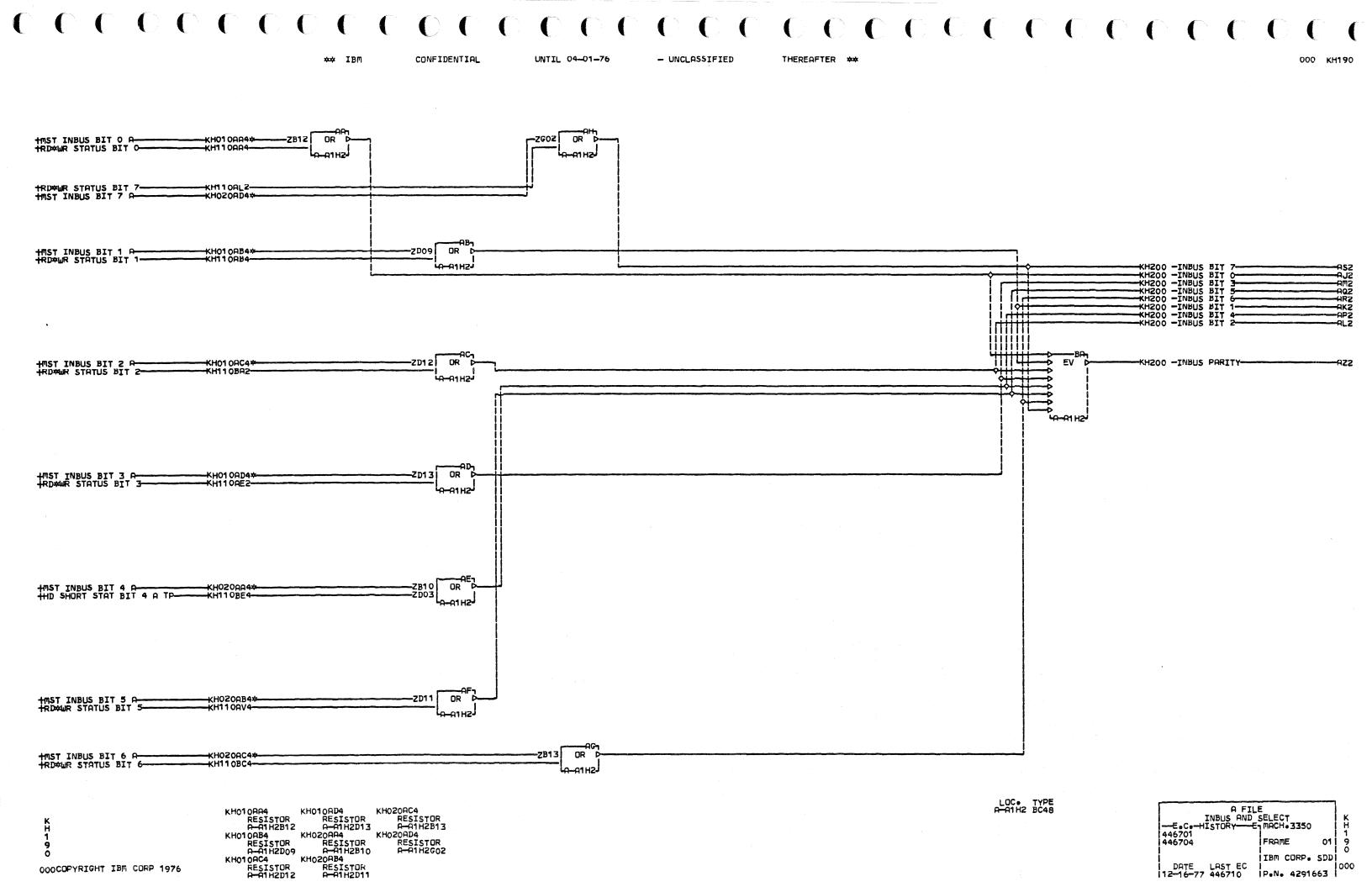
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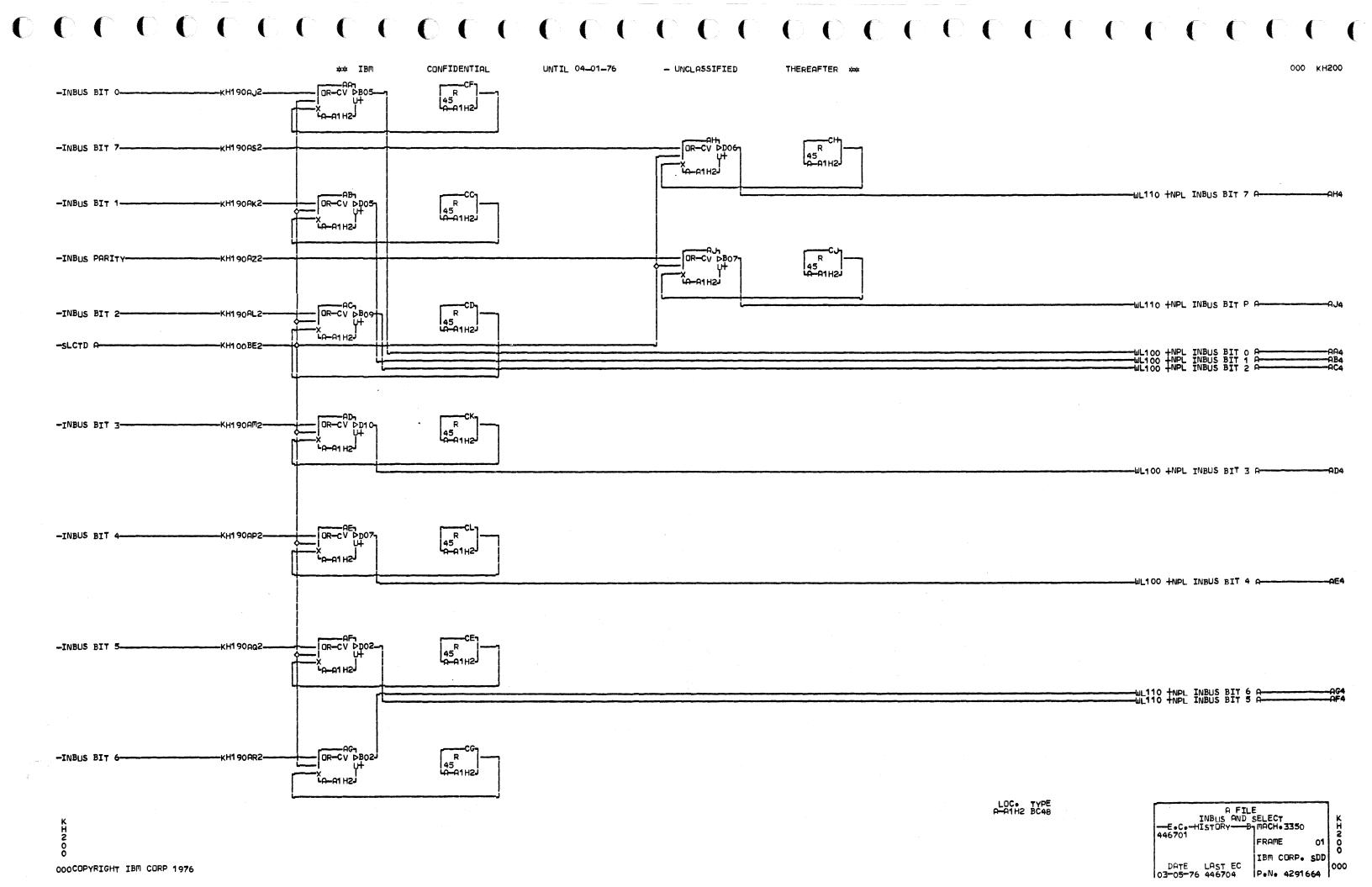


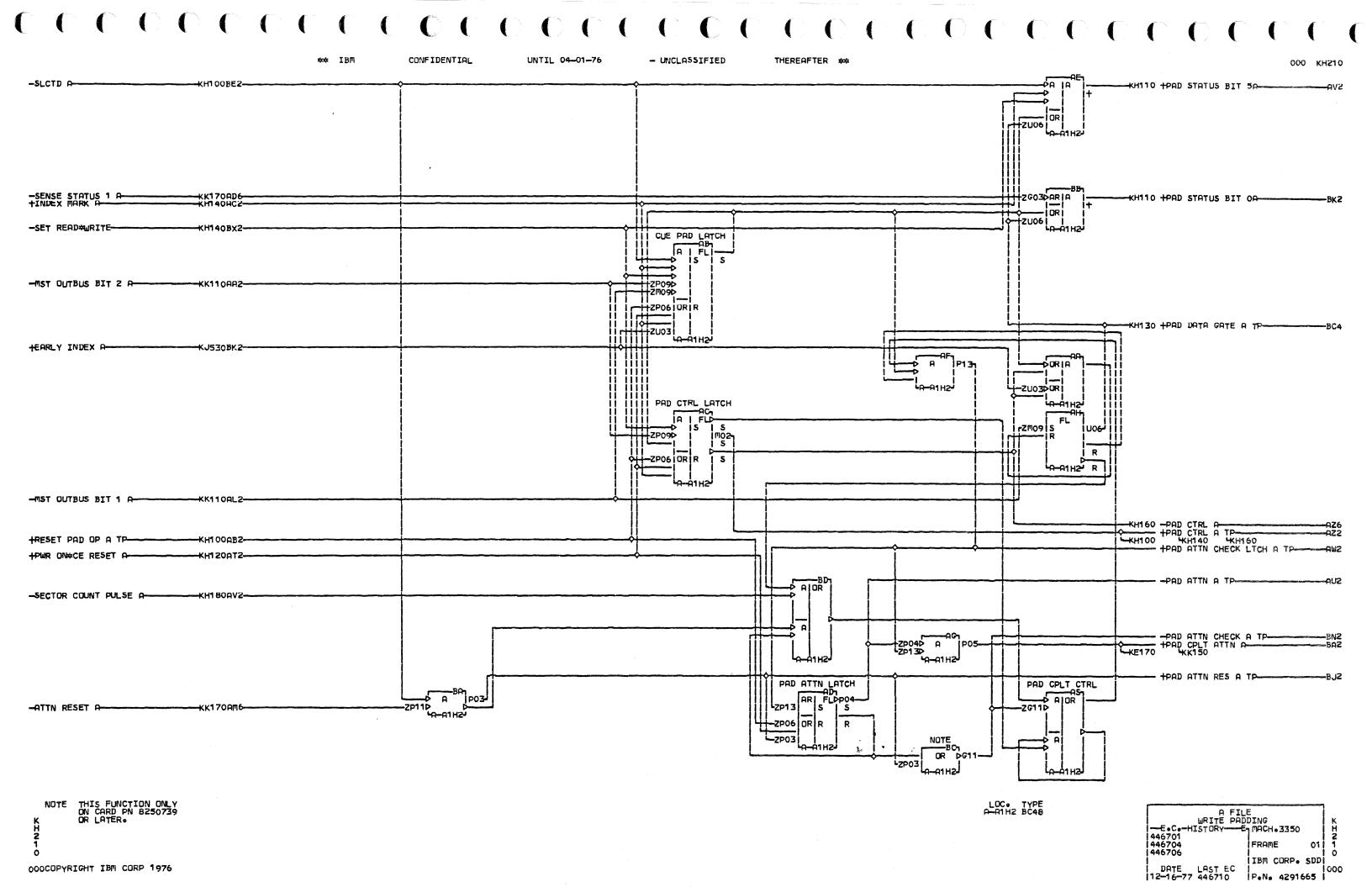


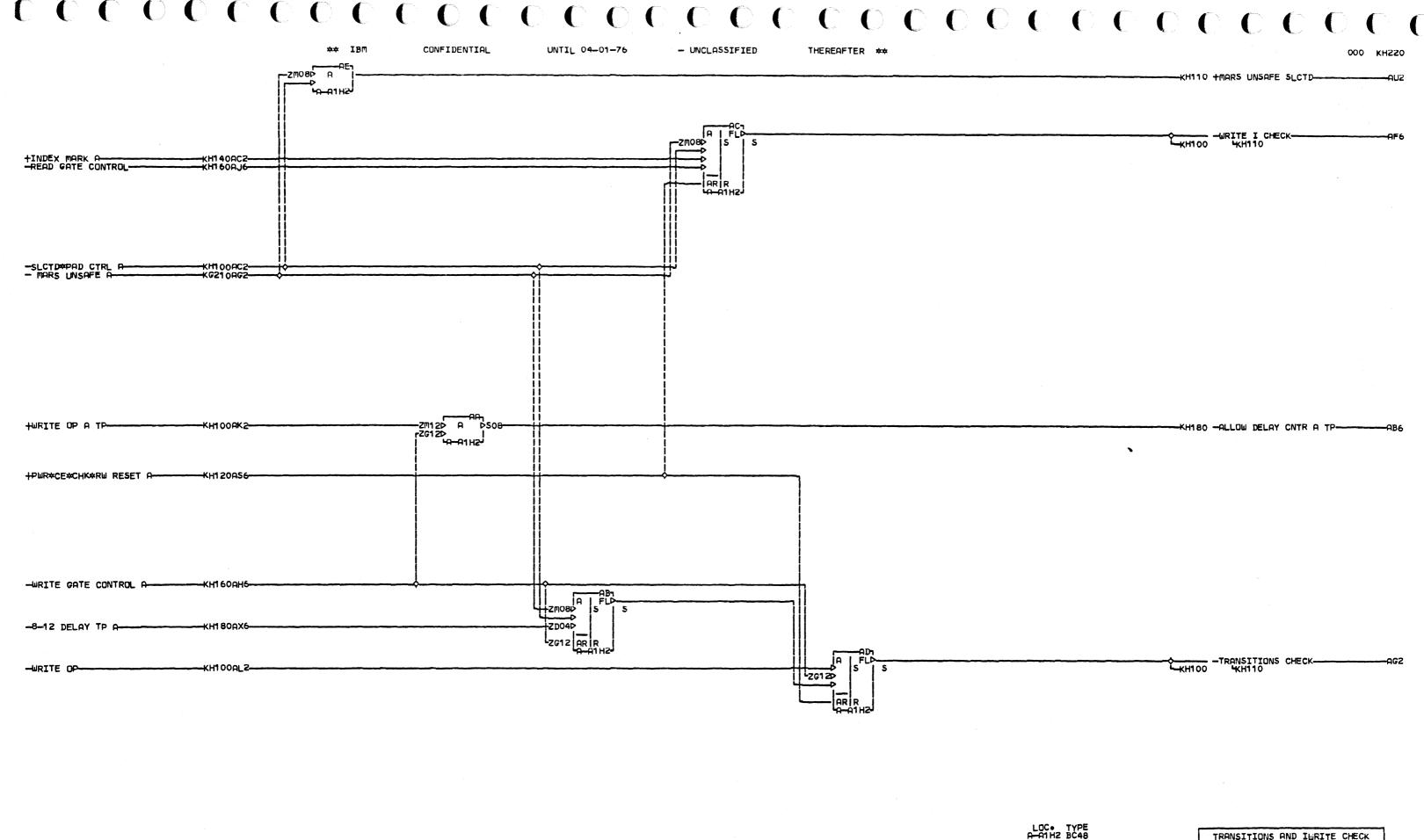
LUC. TYPE

A FILE
READ WRITE CONTROLS AND SAFET
—E.C. HISTORY—E MACH.3350
446701
446704
446705
IBM CORP. SDD
DATE LAST EC
12-16-77 446710
P.N. 4291662









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TRANSITIONS AND IWRITE CHECK

-E.C.-HISTORY -E. MACH.3350 H 2
446704 FRAME 01 2
446705 IBM CORP. GPD

DATE LAST EC
12-16-77 446710 P.N. 4291666

000 KJ100 ** IBM CONFIDENTIAL UNTIL 04-01-76 - UNCLASSIFIED +FIXED HD SELECT GATE A-KG170BK6--WL180 +READ*WRITE DATA ADIFF READ X A TPWL180 -READ*WRITE DATA ADIFF READ Y A TPRAW QD DATA A TPAM SEARCH A TP 1
AM SEARCH A TP 2
LIN SIG A TP 1 AB3 - ДВ4 - ДВ5 -AB6 -AB7 -AB8 -AB9 -READ TRANSMIT A--KH170AK6--- FIXED HEADS A DATA Y HDA----SQUELCH GATE A---KH160BS2---KH160AV6-+PAD GATE A +SERVO CLOCK SELECTED A - SEL IW A + MARS UNSAFE CURRENT A HDA - HEAD SEL 1 A HDA + DJAG SET HI IJW A --KH1 30AY2---KH1 60AA2---KG200AF2---KG21 0AA2---KG1 70AX6---KH1 70AE2-- WRITE CURRENT A HDA-LIN SIG A TP 2

WRITE DATA A TP 1

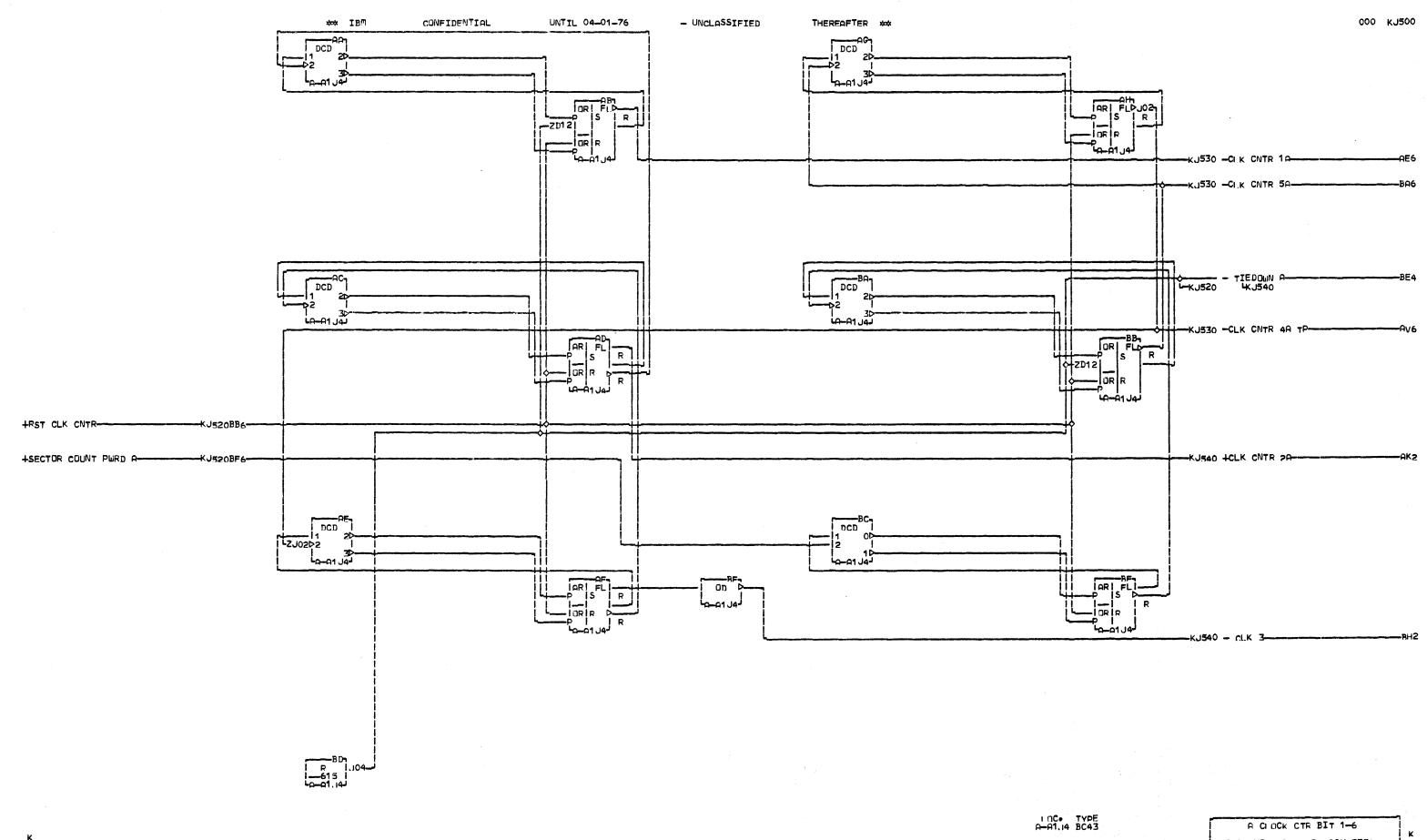
WRITE DATA A TP 2

KH170 -DELTA IW ON A -605 نجل 19-14

RA1 A-A1H1B11
AA2 A-A1H1B11
AA3 A-A1H1C13
AA3 A-A1H1A11
AA4 A-A1H1A13
AA5 A-A1B2B03
O1A-A1B2D03

1 11C+ TYPE A-A1.12 BC40

		~~~	
READ DETECTOR A			
-E.CHISTORY-B-MACH.3350			K J
35460	FRAME	01	0 0
146702	IBM CORP.	GPD	
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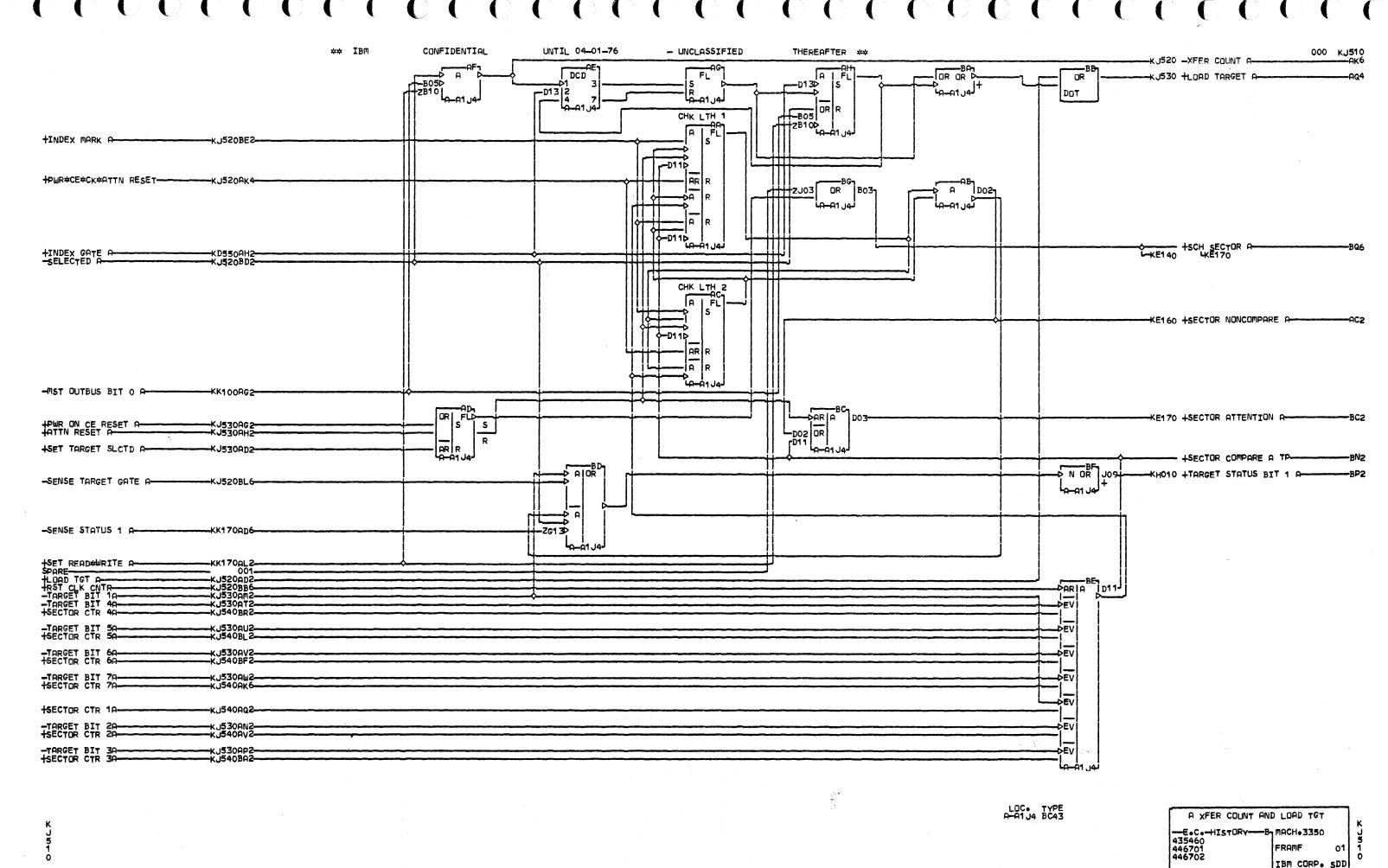


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A CLOCK CTR BIT 1-6

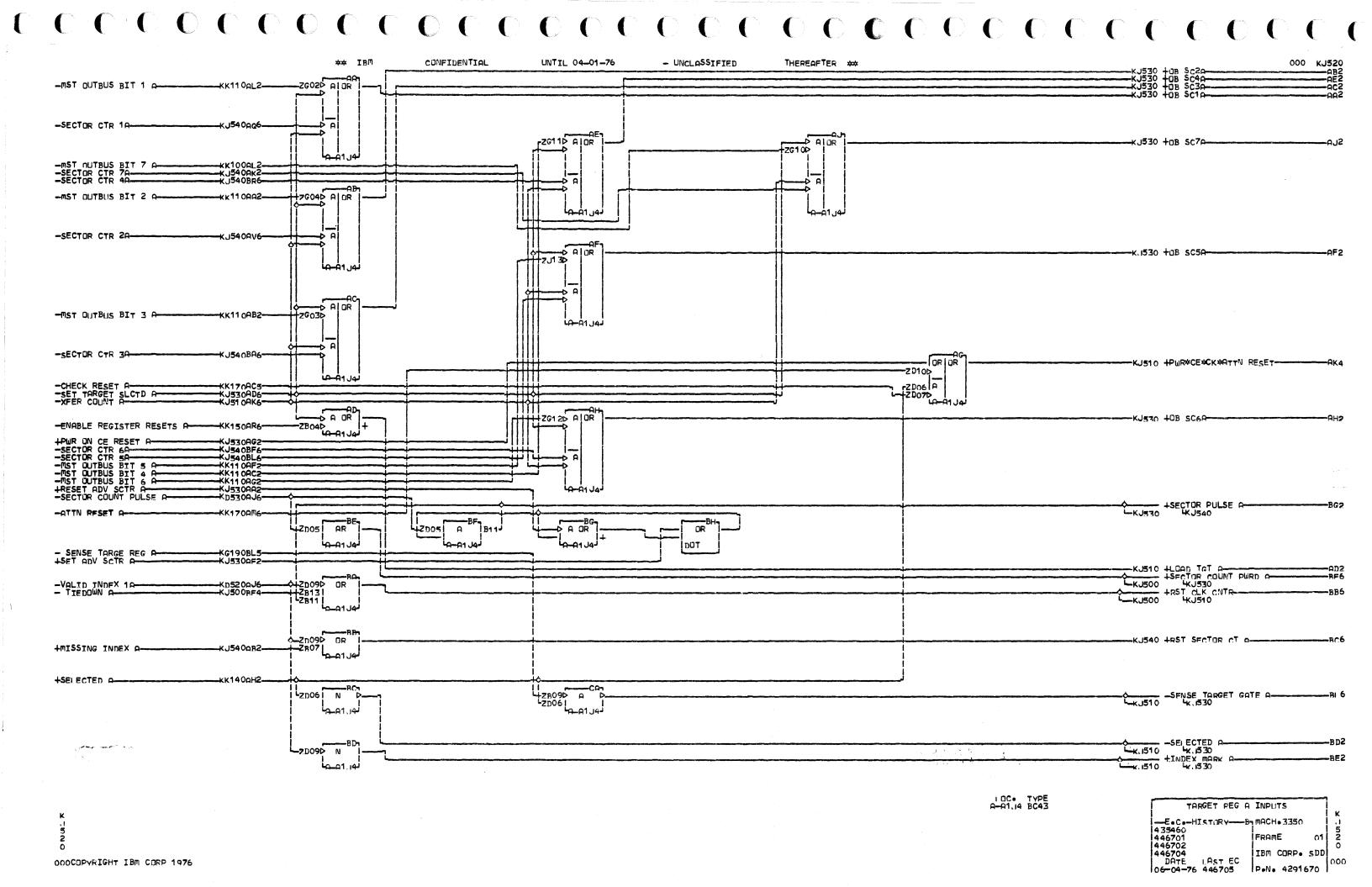
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DATE LAST EC
06-04-76 446705
P-N- 4291668

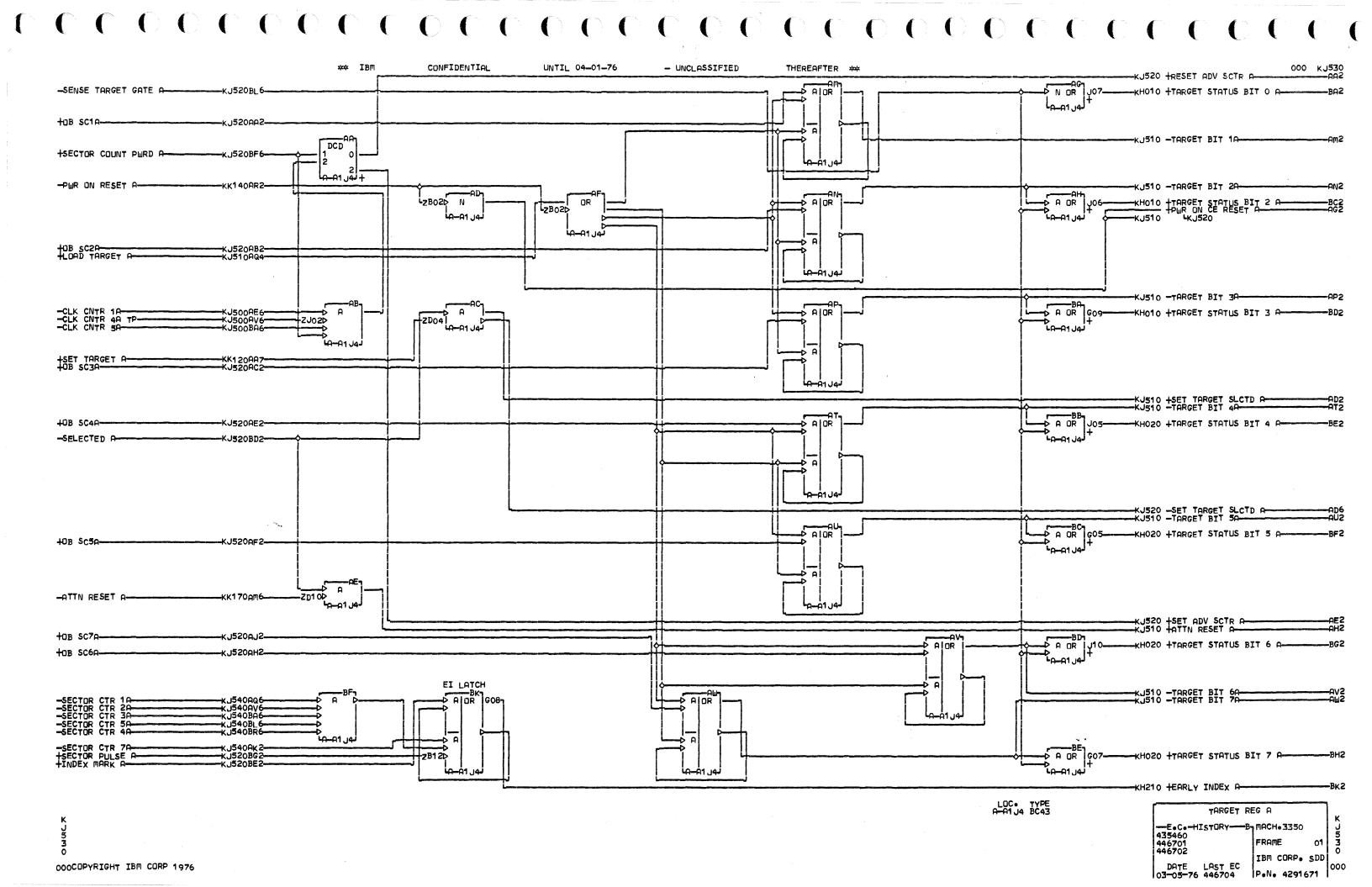


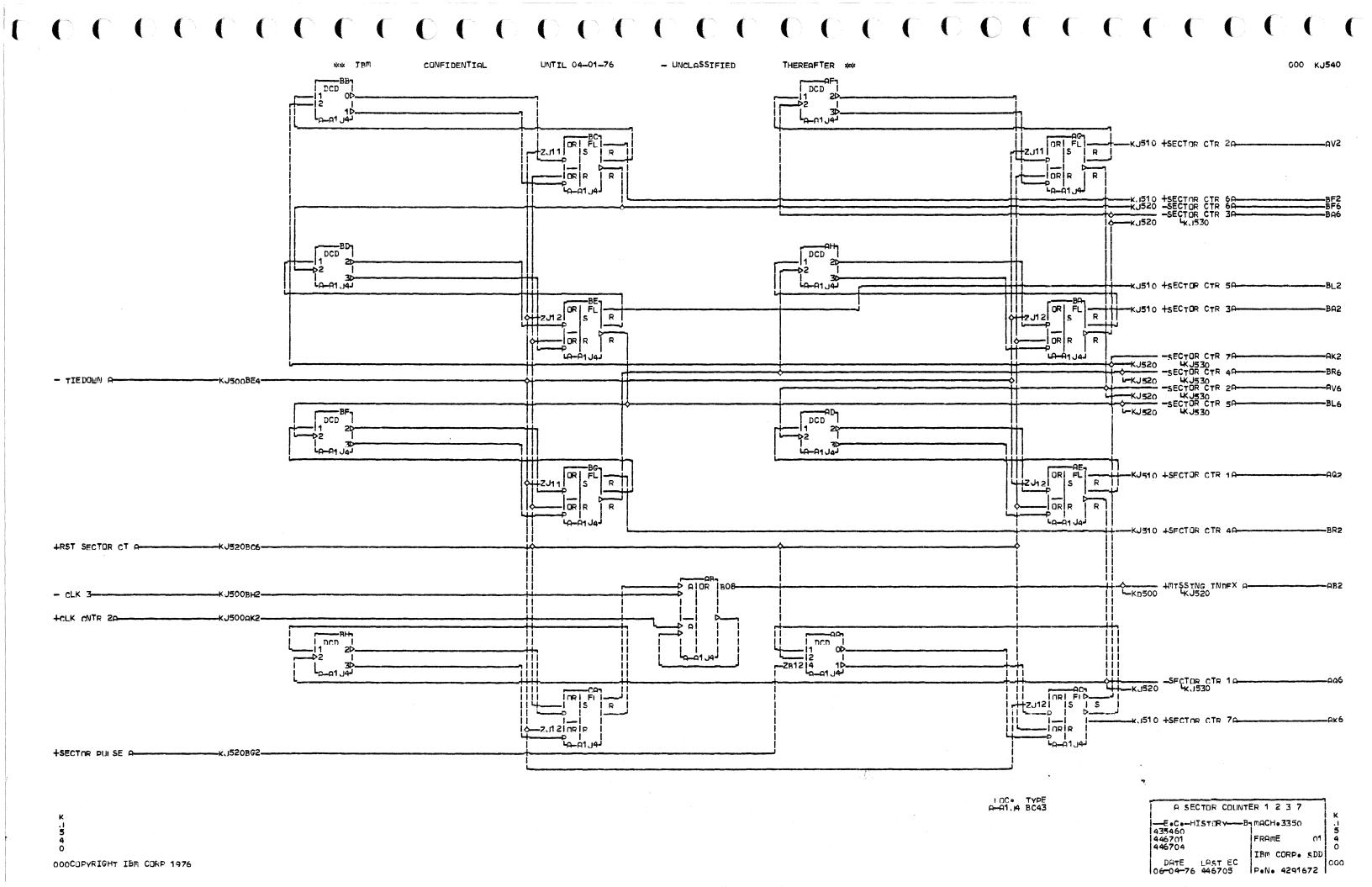
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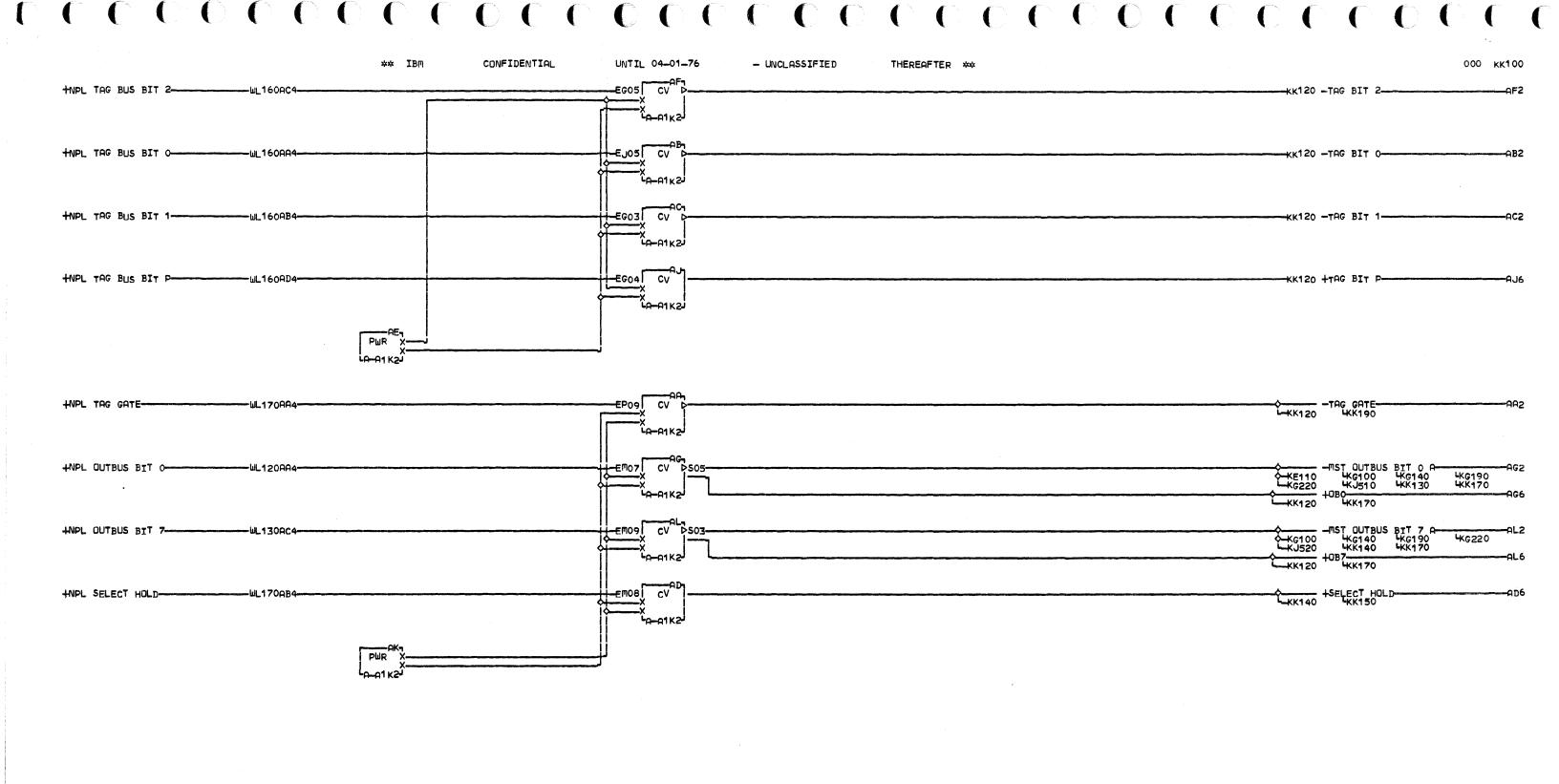
P.N. 4291669

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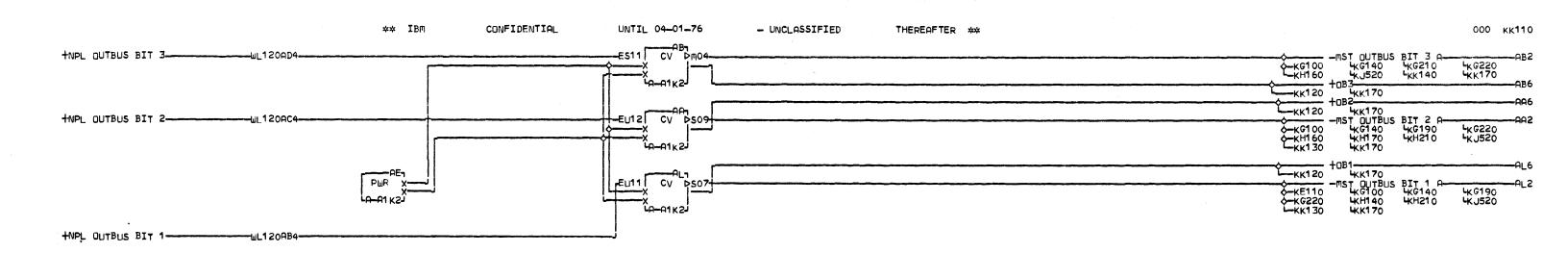


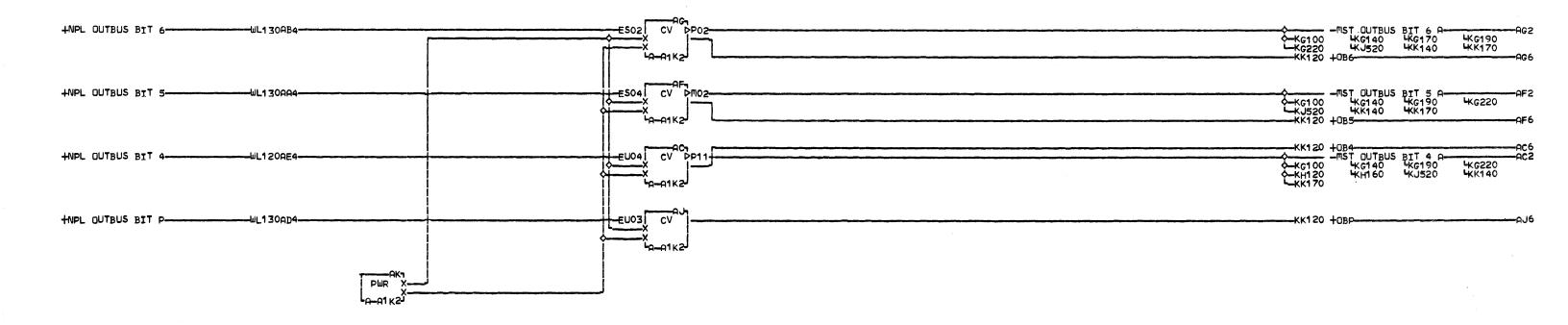


LOC. TYPE

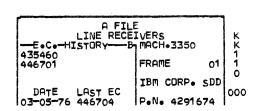
A FILE
LINE RECEIVERS
435460
446701 FRAME 01
DATE LAST EC
03-05-76 446704 PeNe 4291673

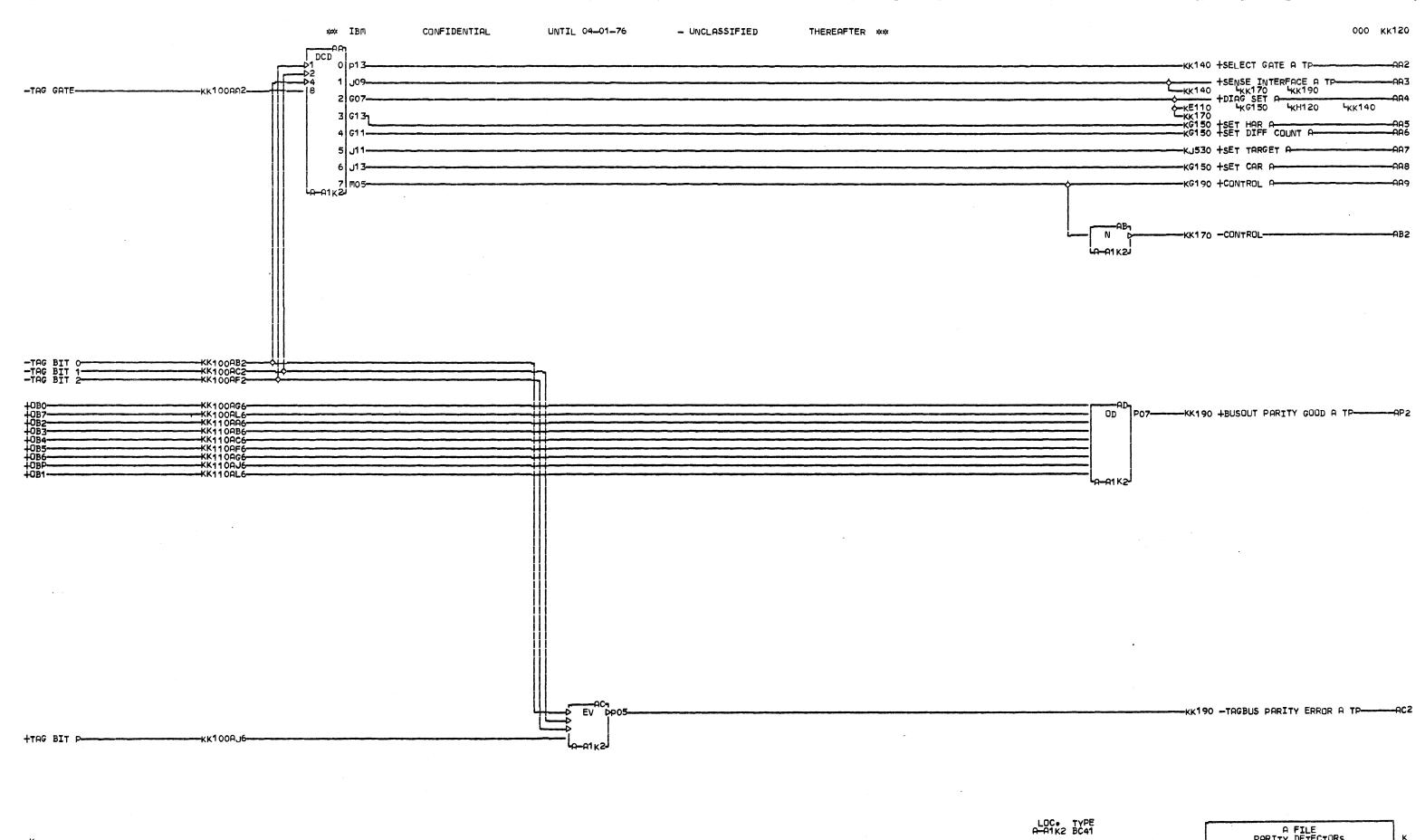
1 0 0 000COPYRIGHT IBM CORP 1976





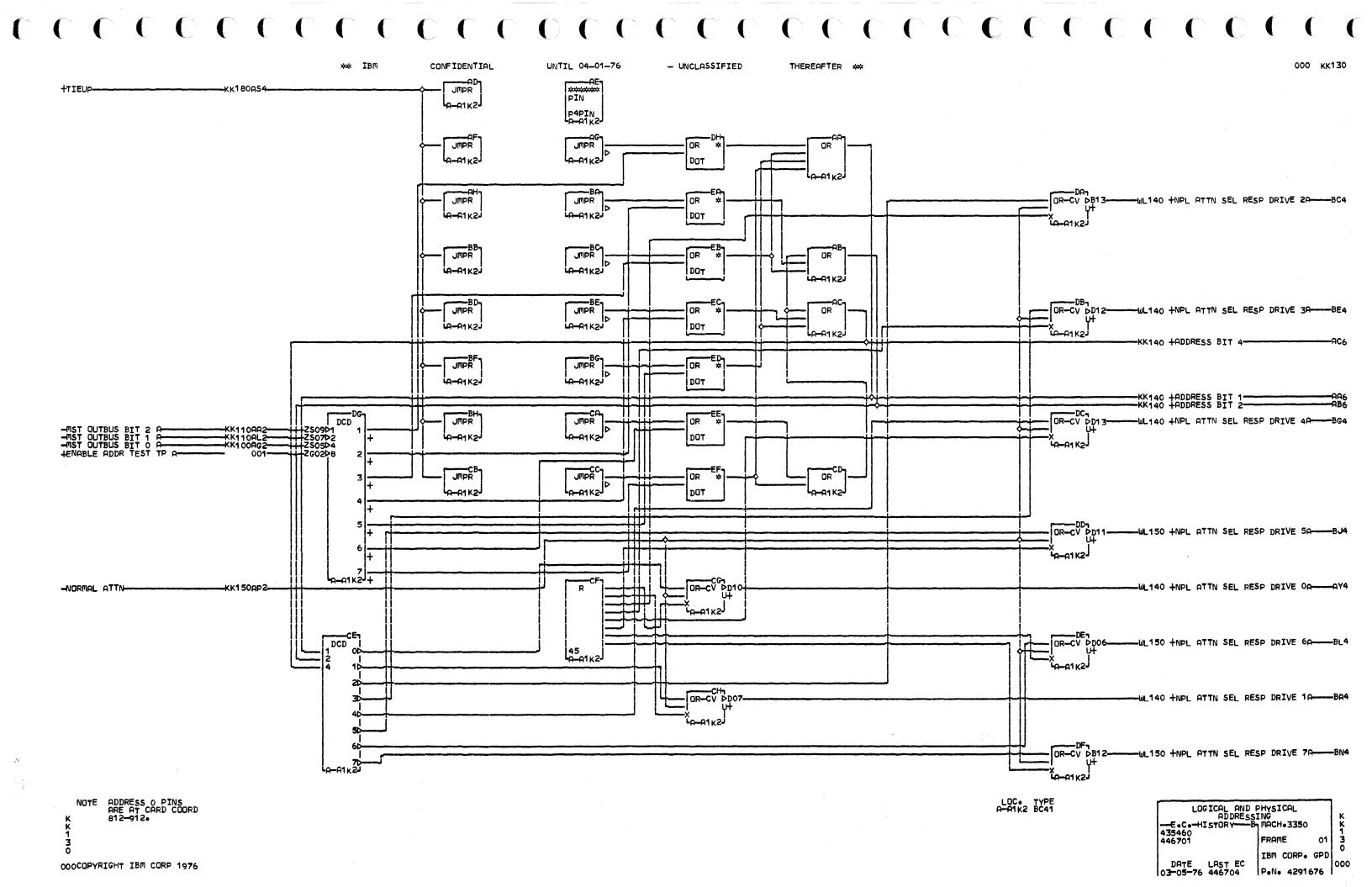
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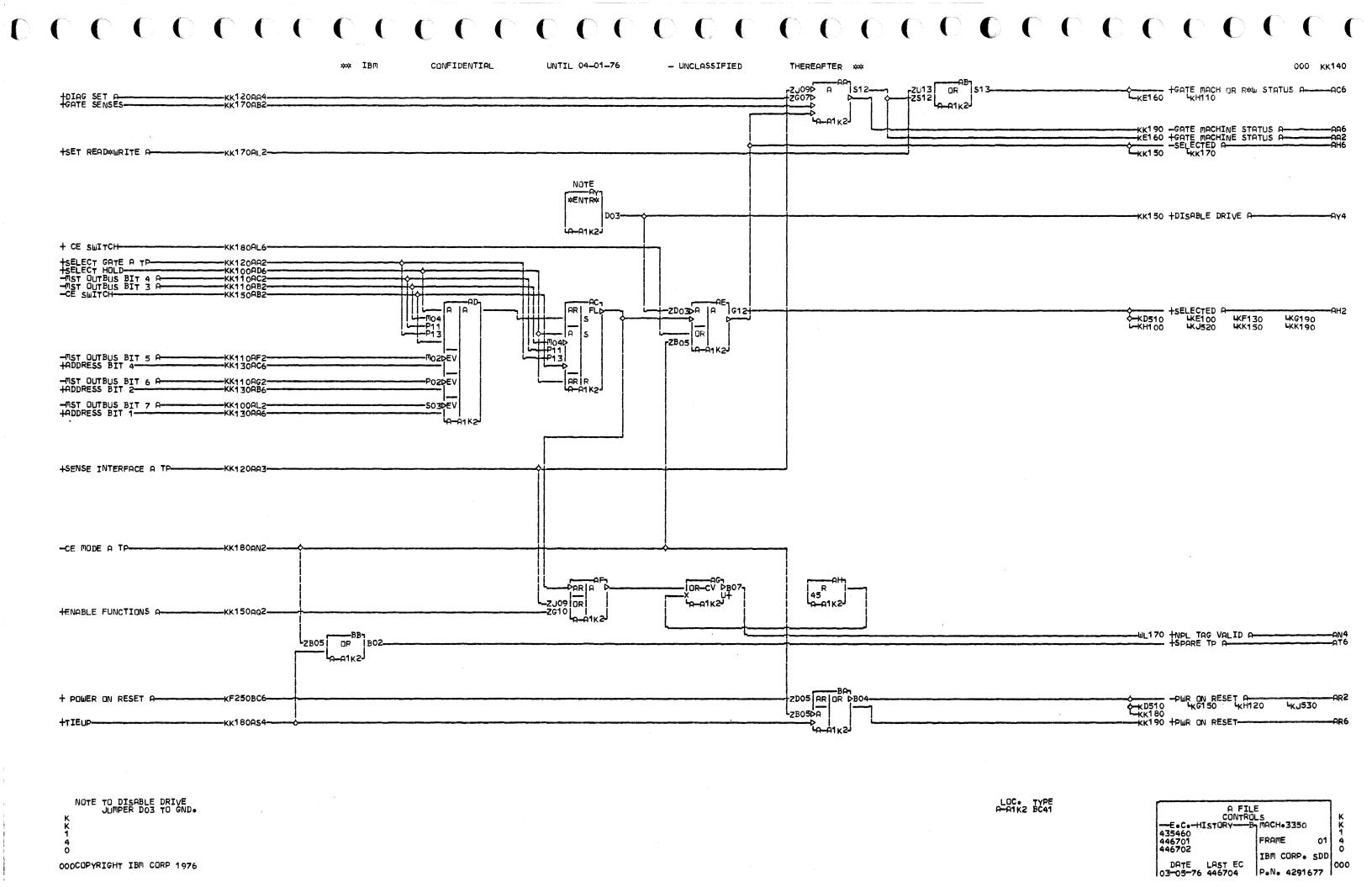


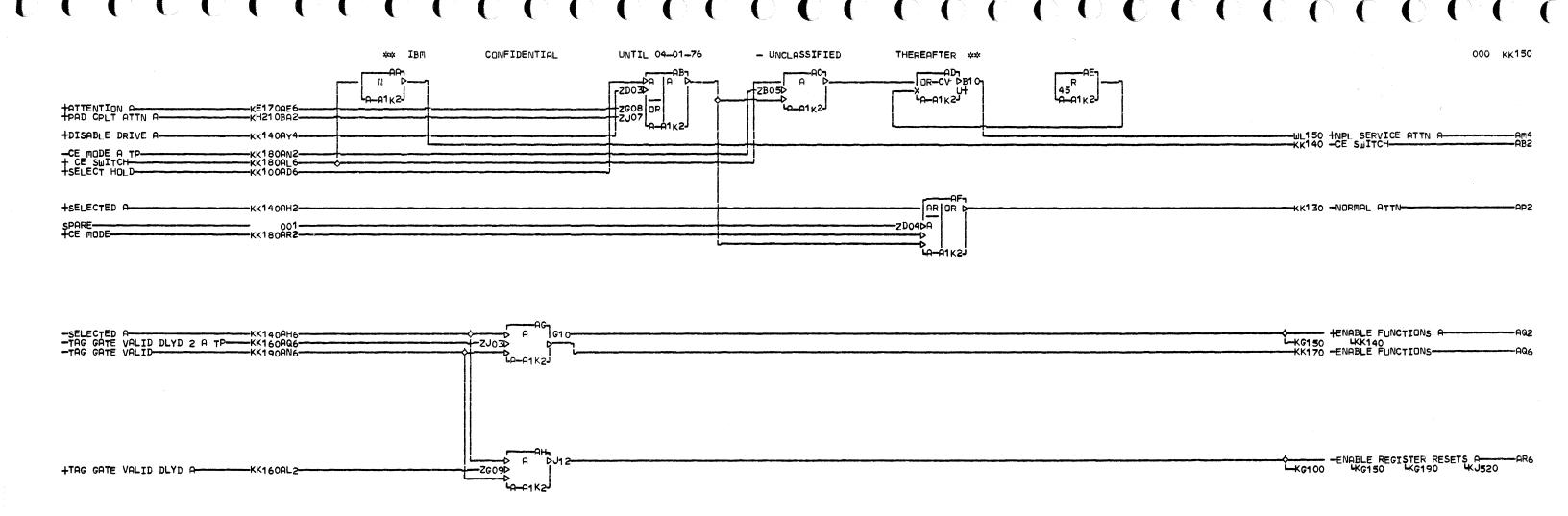


O OOOCOPYRIGHT IBM CORP 1976 PARITY DETECTORS

435460
446701 FRAME 01
2
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DATE LAST EC
03-05-76 446704 P•N• 4291675







LOC. TYPE A-A1K2 BC41 ×× IBM

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UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

TAG GATE VALID

KK150 +TAG GATE VALID DLYD A TP—AGA

RK150 +TAG GATE VALID DLYD 2 A TP—AGA

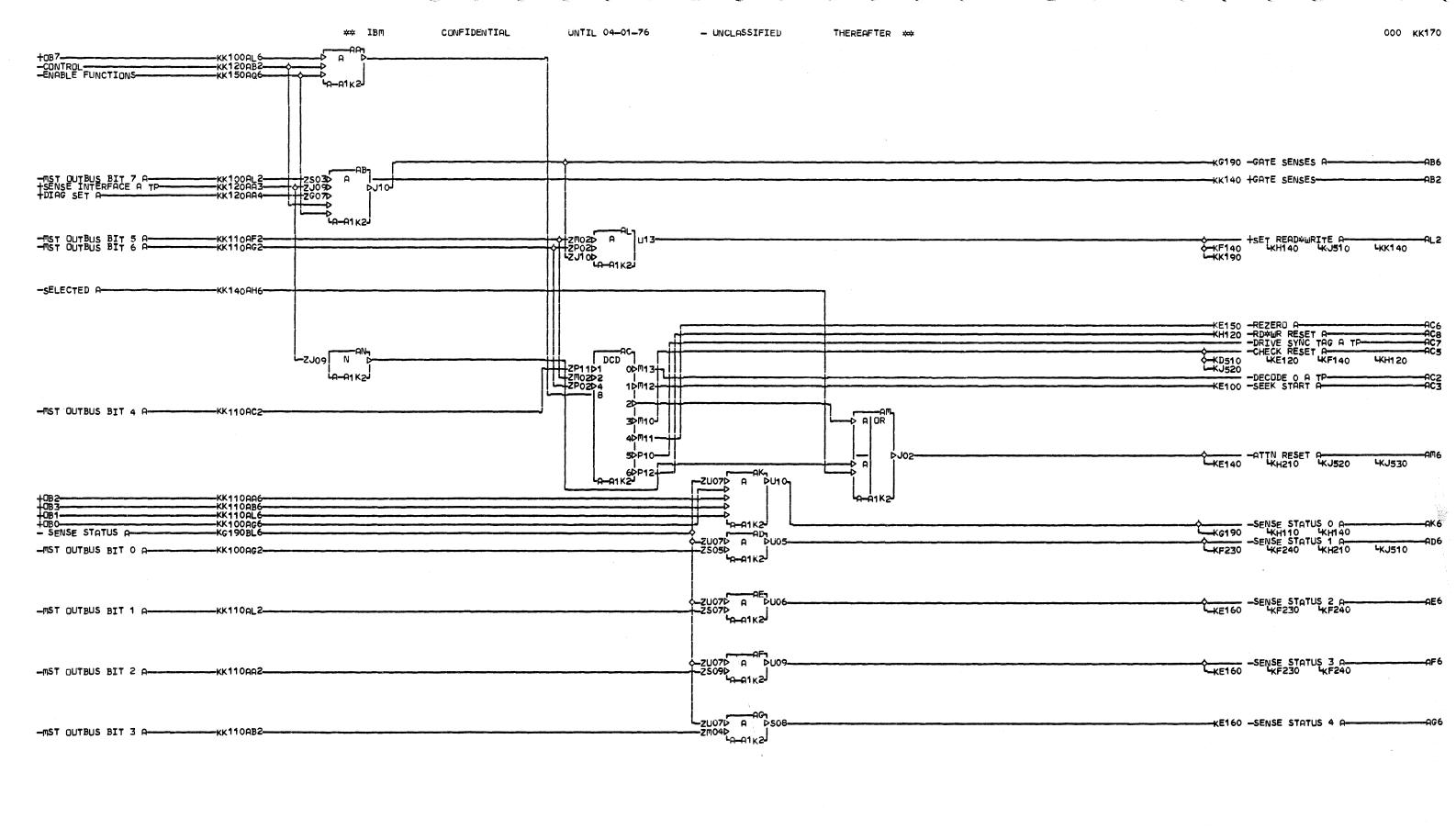
LA-A1K2

TAG GATE VALID

KK150 -TAG GATE VALID DLYD 2 A TP—AGA

LA-A1K2

LOC. TYPE A-A1K2 BC41 000 KK160



A FILE
DECODERS
435460
446701

DATE LAST EC

DATE LAST EC

03-05-76 446704

A FILE
DECODERS
FRAME
01
01
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0000
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LOC. TYPE

** IBF

CONFIDENTIAL

UNTIL 04-01-76

- UNCLASSIFIED

THEREAFTER **

+24V CE ACTIVE A YA072 001 803 XZSAE DOS CV BOS CV



NOTE B BOX HAS YB PAGES.

AA4 A-A1A5B03

INC. TYPE A-A1k2 BC41 A FILE
CONTROLS
435460
446701
446702
446704
DATE LAST EC
06-04-76 446705
PeNe 4291681

000 KK180

** IBM

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THEREAFTER **

-KHO20 +INTERFACE STATUS BIT 6 A-P07D G12I U13D PV9 OR R -KHO10 +INTERFACE STATUS BIT 1 A----+SELECTED A--KK1 40AH2--GATE MACHINE STATUS A--KK1 40AA6-+SET READ #WRITE A--KK1 70AL2-- -TAG GATE VALID--TAG GATE-TAGBUS PARITY ERROR A TP--KK1 00AA2--KK1 20AC2-#PWR ON RESET #SENSE INTERFACE A TP #BUSOUT PARITY GOOD A TP KK1 40AR6 -KK1 20AA 3--KK1 20AP 2-POSD S C12 DO DR R KHO20 +INTERFACE STATUS BIT 7 A-AP2

> LOC. TYPE A-A1K2 BC41

A FILE
ERROR LATCHES
435460
446701

DATE LAST EC
03-05-76 446704

A FILE
ERROR LATCHES

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